

This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`



PROPERTY OF
University of Michigan Libraries
1817
ARTES SCIENTIA VERITAS

THE SCHEME OF EPICURUS.



THE SCHEME OF EPICURUS:

A RENDERING INTO ENGLISH VERSE OF THE UNFINISHED POEM OF

LUCRETIUS,

ENTITLED

"*DE RERUM NATURÂ*,"

("*The Nature of Things*")

BY

THOMAS CHARLES BARING, M.A., M.P.

LATE FELLOW OF BRASENOSE COLLEGE, OXFORD

LONDON

KEGAN PAUL, TRENCH, & CO., 1 PATERNOSTER SQUARE

1884.



B
577
L63
D43
1884

From the library of
Francis W. Kelsey
2-2-51

5-21-51 DUFP

CONTENTS.

BOOK I.

PAGE

OF BODY AND VOID 1

BOOK II.

OF FIRST-BEGINNINGS 53

BOOK III.

OF MIND AND SOUL 109

BOOK IV.

OF THE SENSES 129

BOOK V.

HOW THINGS CAME TO BE 215

BOOK VI.

OF STRANGE THINGS 287



BOOK I.

OF BODY AND VOID.



BOOK I.

DEAR Mother of Æneas' sons, thou kindly Venus, given
To gladden men and gods, who 'neath the gliding stars of heaven
Oft visitest ship-laden sea and harvest-yielding earth,
Because each kind of breathing things by thee is brought to birth,
And born beholds the sun that shines effulgent in the sky:
Before thy feet the winds retreat, the clouds, O goddess, fly
At thine approach; her fragrant blooms the earth puts forth to thee
In varied sheen, while laughter lights the levels of the sea,
And quieted the heavens are bright with broadcast brilliancy.

For soon as Morning 'gins abroad her spring-tide mien reveal,
And, loosed from Winter's chains at last, Favonius' breezes feel
Their life-begetting strength renewed, the birds that wing the air,
Smit to the heart by thine assault, are first, O goddess fair,
Thee and thine entrance to proclaim; then wildwood beasts of prey
And herds swim rapid streams, and leap about the meadows gay.
So by thy grace and blandishments is Nature thralled indeed,
That eagerly each follows thee where'er thou each wilt lead;
Till in the ravenous rivers, in the mountains, in the main,

Amidst the leaf-clad homes of birds, and on the verdant plain,
Soft love implanting in their breasts, thou mak'st them all inclined
New generations to beget according to their kind.
So since the nature of all things thou only dost control,
And to the realms of light divine without thee not a soul
Can rise, nor aught with gladness or with loveliness is dight;
I crave thee for my fellow whilst the verses I indite,
Which I about this Nature am endeavouring to rhyme
For Memmius my good friend, whom thou, O goddess, for all time
Honoured in every thing hast willed and eminent to be:
Wherefore the rather give my words grace for eternity.
And cause, O goddess, that meanwhile all cruel offices
Of soldiering may rest in sleep on land and over seas;
For thou alone the power dost own our mortal folk to sain
By quietness and peace; for Mars, the battle-king, bears reign
O'er all the ruthless ways of war, and he upon thy breast,
By love's undying wound subdued, oft casts himself to rest.
So when, his smooth neck backward thrown, he gazes up at thee
With open mouth and eyes fulfilled of love's cupidity,
When e'en his breath hangs on thy lips, then, great Divinity,
Shed thyself forth while he shall on thy sacred body lie,
And him with pleadings manifold and sweet entreaties ply,
The blessed boon of gentle peace for Roman folk to sue:
Since in our country's day of ill, nor I at ease can do

My work, nor may the Memmii's most illustrious scion feel
Free in such case from serving our endangered Commonweal.

As for the rest, Memmius my friend, an ear unbiassed bring,
And judgment clear from worries free, to Truth's own reasoning;
Lest these my gifts, which orderly my faithful pains provide
For thee, before thou understand, thou cast in scorn aside.
For of the law of highest heaven, of gods who dwell therein,
I fain would talk with thee, would show to thee the origin
Of things; whence Nature makes them all, and grows, and nourishes;
And whither, when they cease to be, herself disperses these;
Which we, when we would give account, are 'matter' wont to call
And 'generative bodies,' and the very 'seeds' of all.
And since from these all other things are fashioned primally
We take them for the primal forms of our philosophy.

When human life long time on earth in pitiful estate
Lay grovelling, bowed down beneath old Superstition's weight,—
Who evermore from out the heavens above her head would show
With awful face to this our race of dying men below,—
A man of Greece in hardihood supreme uplifted first
His mortal eyes against the skies, and first resistance durst.

Him nor traditions of the Gods, nor thunderbolts, nor roar
Of threatening heaven, could turn aside, but ministered the more
Fierce vigour to his dauntless soul, his eagerness impelled
To burst the bolts of gates shut-fast that Nature's secrets held.
And so his strength of will obtained the mastery, and he
Strode far away beyond the world's enkindled boundary,
And wandered o'er in mind and thought the measureless abyss:
And thence he brought us word, the fruit of that success of his,
Of what may be and what may not, and how for each and why
Power with set limits is ordained, a goal set up on high:
Till Superstition, in her turn defeated, trampled lies
Under our feet, and conquest makes us even with the skies.

One thing in this my task I dread: lest thou shouldst haply deem
Thou'rt learning evil rudiments of reasoning, and seem
To tread the path of wickedness; whereas in olden time
Religion oft engendered deeds of godlessness and crime.
She caused what fell in Aulis in Diana's temple, when
The chosen leaders of the Greeks, the very first of men,
Her virgin altar foully stained with Iphianassa's blood.
For when around her maiden locks the wool in stead of snood
Was fastened and about her cheeks hung down on either side
When she beheld the acolytes attempt the knife to hide,

Because before the altar stood her father full of woe,
While all the people of the town shed tears to see her so;
Then dumb with fear she sought the earth, as at their knees to
plead:
But nought the hapless girl it helped in that her time of need,
That, eldest-born, she gave the name of father to a king:
For manly hands uplifted her, and bare her quivering
Up to the altar, not a bride to bridegroom's dwelling led
With shrilly cries of 'Hymen Hail!' and ritual perfected,
But at her very wedding-time a maid, unmaidenly
A victim, by her father's stroke to perish wofully:
That so with omens prosperous the Grecian fleet might sail.
So far to counsel evil things Religion did avail.

Thyself wilt some fine day from me thyself to sever seek,
O'erpowered by the preachers and the fearful words they speak;
Because, in honest sooth, they still their visions feigned can ply
Innumerous, and so can turn thy way of life awry,
And bring to naught by sheer alarm thy whole prosperity.
And not unjustly. For, if men some certain end could see
Of all their troubles, they would find some method to resist
The silly superstition or the menace of a priest.
But now, since folk must dread in death to find undying pain,
Each mortal knows that to oppose nor plan nor means remain.

For what the nature of the soul is no man witnesseth,
If it be born with us, or if when first we draw our breath
It come to us, and die with us, destroyed when we are dead
Or if it pass to Orcus' shades and pools untenanted;
Or by God's will it find a home in other living thing,
As Ennius my master sang, the first whose art could bring
From pleasant Helicon the crown that evermore is green,
'Mongst Italy's rough country folk to don a novel sheen.
But Ennius proclaimed beside in verse that ne'er will die
The existence of an Acheron, and regions vast thereby,
Where neither souls of ours, he said, nor bodies may avail
To dwell, but only shadow-forms most marvellously pale.
And thence he tells how Homer came, the ever great, and stood
Beside him, and, while briny tears his phantom cheeks bedewed,
Expounded all the hidden laws of Nature's every mood.

So inasmuch as we are bent of everything above
To give account, and how the sun and moon unceasing move,
And wherefor, and to show the force on earth that governs each
Of earthly things; so more than all should Reason's shrewdest reach
Whence comes the soul, and how the mind is constituted, teach;
And what that thing can be, which comes to us when wide awake
In sickness, or when deeply wrapped in sleep, our minds to shake,

So that in fact we seem to hear and see before our eyes
Men dead and gone, whose crumbling frame in earth's embraces lies.

And now full well I know how hard in Latin verse it is
To bring afresh to light the Greeks' obscure discoveries;
Specially since with novel words we must have much to do,
Because our language is so poor, our subject matter new.
Yet, spite of all, thine own desert, my Memmius, and the sweet
Hope of thy pleasant comradeship, inspirit me to meet
Whatever toil may be my lot, to watch through all the long
And starlit nights to find the words and choose the fittest song
Whereby to spread the brilliant lights of Truth before thy mind,
That so thou may'st scan throughly things which heretofore
were blind.

Well then, this darkness and this dread that make our minds
their prey
'T is need that, not the sun's glad light, nor gleaming shafts of day,
But Nature's form and Nature's law, should throughly sweep away.
And of her first great principle be this foundation laid,
That nothing out of nothing e'er by will divine is made.
For only thus does dread control all folk of mortal mould,
Because we all in heaven and earth so many things behold,
For which with all our reasoning we fail to find a cause;

And so we reckon them the fruit of superhuman laws.
From which results that, when we see that naught from naught can be
Produced, what we are after we shall then more properly
Discover; whence it haps to each existing thing to rise,
And how 't is made without the aid of Gods beyond the skies.
If out of nothing aught could come, then every sort of breed
Could grow from every sort of source, and naught would want a seed:
The sea could then engender men; the earth to being bring
The scaly and the feathered tribes; then out of air would spring
Kine, sheep, and goats; while beasts of prey, that Afric's deserts roam,
At random born would make the fields of Italy their home.
Then would not trees the selfsame fruit produce from year to year,
But changefully, and any tree would any fruitage bear:
For where no generative form of anything might be,
How could things any mother have save sheer uncertainty?
But now since all things are begot from seeds quite definite,
Thence each of them is born, and thence comes forth into the light
Wherever its materials lie and primal entities.
So that all things can grow from all this patent fact belies,
That in things different there dwell peculiar properties.

Why do the roses deck the spring, why in midsummer's heat
Does grain grow ripe, or vine-leaves fall in autumn at our feet?
Unless because at proper times the proper atoms meet
Of each, and so creation's work is made in each complete,
Whilst still the seasons fitting are, and still life-giving earth
To realms of light the tender things can safely bring to birth.
But these, could they of naught be made, would suddenly appear
In places hazard-picked, and in wrong portions of the year:
For then no first-beginnings would by weather's withering
Inclemency be hindered from productive gathering.
Nay further, on the meeting of the atoms, need were none
Of time for things to wax, if out of naught they could be grown:
For then to-day would make young men of babes of yestere'en,
And copses from the ground would burst in sudden wealth of green.
Whereas 't is plain that none of these things happen; for indeed
All creatures slowly grow, as grow they should, from their own seed,
And keep the traces of their stock in growth; that all may know
That each on matter of its own must feed itself to grow.
Besides all this without the year's apportioned fall of rain
The earth could not put forth her crops of heart-rejoicing grain,
And futhermore no living thing, dissevered from its food,

Could propagate its kind, or e'en maintain its livelihood.
Wherefore thou mightest rather deem that many an entity
To many bodies common is, as sounds in words we see,
Than without first-beginnings that a single thing could be.
Again why could not Nature men of such a size prepare
As o'er the seas to pass with ease, as if thy shallows were,
Afoot, and with their hands apart the mighty hills to rive,
And many lives of common men in triumph to survive,
Save that for all creation's work is given but limited
Material, and some rule exists what may thereout be bred?
Therefore of need that naught from naught is born we must confess:
Since every thing requires a seed, which under Nature's stress
Uprises to the breezy air's embracing tenderness.
Moreover since we always see that cultivated lands
Are better than the waste, and aye return upon our hands
A richer harvest, it is plain that 'neath the sod there lie
Things' first-beginnings, which, when we plough up for husbandry
The turf, subduing fertile earth, we stir to birth thereby.
For, were there none of these, without assistance from our toil
We should behold far better things self-started from the soil.

To this I add that Nature each created thing abates
Into its own first elements, nor aught annihilates.

Because, if any thing at all in every part could die,
Things suddenly would perish, snatched away before one's eye;
And scope were none for violence, which by its onset might
Dissever part from part, and all their couplings disunite.
But now as things are made from seed that lives eternally,
Till force come in their way, and they are shattered suddenly
As by a blow, or else dissolved by ills that through their void
Strike inly, Nature ne'er allows a thing to be destroyed.

Besides, if whatsoever Time removes by eld's decay
Perish outright, and with it all its substance take away,
From whence to light and life, I ask, does Venus bring again
Each kind of living beings? whence creative Earth sustain,
And give to each its proper food, and bid it wax amain?
Whence do its native springs, and streams exhaustless from afar,
The sea replenish? Whence does air feed each remotest star?
The endless eons of the past, the days long since gone by,
Had put long since an end to all whose frames were made to die.
But if that distance infinite, those perished ages, knew
The seeds from which this present world of ours is made anew,
These are endowed beyond a doubt with immortality,
And therefore nothing ever can to nothing altered be.

And next the very cause of force had all creation felled
Impartially in ruin, had not deathless matter held
All things together, each with each or more or less entwined

By mutual links, because one touch full cause that all had dwined
Had surely been; for where no forms indissoluble be
There any force were strong enough to wreck an entity.
But now as first-beginnings are by many kinds of ties
With one another interlaced, and matter never dies,
Each thing remains in sound estate, until some force appears
Of impact sharp enough to rend the garment which it wears.
So nothing ever comes again to nothingness, but all
Dissevered turn afresh to forms of raw material.

Lastly the rains are lost whene'er the author of their birth,
The welkin, casts them headlong on the lap of Mother Earth:
But sheeny springs the corn, the boughs of trees begin to shoot
With greenery, and stretch themselves, and bow them down with fruit.
And hence the beasts of every sort, and we ourselves, derive
Our food, and hence we see our towns with merry children thrive,
And leafy woods on every side with young birds' songs alive:
Hence weary with their fat the kine in smiling meadows use
To lay their bodies down to rest, while white and milky juice
Drips from their swollen udders; hence in wantonness their young
Disport them on unsteady limbs 'mid grasses soft and long,
Their little souls with sweetness of new milk inebriate.

So then the things we look on yield not utterly to Fate:

For present from departed forms dame Nature fashioneth,
Nor letteth anything be born save through another's death.

Come therefore, since things cannot be create, as we have learned,
From nothing, nor, once gotten, back to nothingness be turned;
Lest haply thou shouldst now begin to deem my lesson lies,
Because their first-beginnings ne'er are viewed by human eyes,
Learn next that there are things, as thou must needs confess, I ween,
Of bodily subsistence, though they never can be seen.
And first of all the violence of wakened winds descends
In blows upon our harbours, swamps the stoutest ships, and rends
The clouds apart: with fearful speed at times their eddy sweeps
O'er plains, and strews them with big trees, and flogs the mountain-steeps
With forest-crashing blasts:—with howls of fury so unkind
And muttering of savage threats so wildly goes the wind.
So past a doubt 'mongst bodies that no mortal may descry
Are winds that sweep the sea, the land, the cloudrack of the sky,
And catch and toss in sudden whirl their booty up on high.
Nor is the method of their flux, the way their wreck they wreak,
Other than that which we behold in water's nature weak
In some o'erflowing river; when, by rains profuse renewed,

From the high mountains plunges down a mighty waterflood,
Hurling whole bushes down with scraps from many a ravaged wood.
Then, be its arches ne'er so strong, the bridge will breast in vain
The coming water's sudden strength, so swollen with much rain
The torrent beats against its piers with overwhelming main.
With one loud crash it bursts the bridge, and 'neath it, as it goes,
Rolls down the massive stones with all that dares its flood oppose.
In just such manner blasts of wind to bear themselves are bound;
When, like a headstrong mountain-stream, on any plot of ground
They bend them down, they push before them all things in their path
O'erthrown with blow on blow; at times they seize them in their wrath
In eddies swift or circling whirl, and carry them afar.
Wherefore, I say again, the winds unsighted bodies are,
Because in all their works and ways they show similitude
To mighty rivers, which we know have bodies that are viewed.
Nay, and we all are conscious of the smells of many a thing,
Yet never see them when towards our nose their way they wing.
We cannot look at summer's heat, the winter's cold defies
Our sight; we take no cognizance of voices with our eyes.
But all of these must needs consist of substance bodily,

Because they have the power to move our sensibility;
And naught can touch or can be touched unless it body be.
Then clothes hung up along the beach that breaks the surging main
Grow damp; the same spread in the sun get quickly dry again.
But how the moisture of the waves soaks into them no eye
Has seen, nor how it passes off with heat and leaves them dry.
So into tiny particles the sea's humidity
Must be dispersed, which human sight has not the means to see.
And further with the quick return of many a solar year
The ring, that on our finger shines, grows thin beneath with wear.
Unseen the flags are hollowed by the droppings from the eaves:
The iron share grows smaller, ere the furrowed field it leaves:
The roadway paving by the feet of all the folk that pass
Is manifestly worn away: the statuettes of brass
That stand beside our gates right hands of minished size extend,
Attenuated by the touch of many a passing friend.
Therefore that these grow less by wear is evident to men.
But what the tiny atoms are that thus depart, and when
They quit them, jealous Nature keeps a secret from our ken.
And lastly, what in course of time by gradual degrees
Nature brings forth and adds to things to cause their slow increase

Our keenest vision ne'er detects, exert it as we please.
Nor shalt thou e'er perceive how things by aging or decay
Are wasted, or what particles by hungry salt sea-spray
The cliffs that beetle o'er the main are losing day by day:
Therefore by bodies hid from us does Nature work her way.

But natheless all things are not made on every side compact
Of body; since that void therein exists is also fact.
And this, my friend, 't will vantage thee to know in many ways,
Not suffering thee aye to stray in hesitation's maze,
Mistrustful of the sum of things, and doubting what I tell.
Void therefore is an empty place, untouched, intangible.
And if this void did not exist, then nothing e'er could be
In any manner moved; because 't is body's property
To hinder and obstruct, and this, whate'er the circumstance,
Would aye be present everywhere; so nothing could advance,
Because no other thing could first make way to give it chance.
Whereas throughout the sea and land, and in the heaven above,
How many things in many ways by divers systems move
We see before our eyes, and these, if void there might not be,—
I do not say would lose or lack their quick mobility,—
But of the very means of birth had never been possessed:

For matter closely packed all round must needs have been at rest.
Moreover, howsoever dense of substance things are thought,
Thou may'st hereby perceive that they are not quite closely wrought;
For water's liquid moisture oft through rocks and cavern-tops
Will ooze, and all things weep at times with plenteousness of drops.
In every living creature food through all its frame is spread:
The trees increase in size, and fruit in proper season shed,
Because, when Spring awakes their life, the earth's sweet nourishment
From lowest root through trunk and branch to every twig is sent:
Through party walls and chambers closed in houses flit the tones
Of folk in talk: a stiffish frost will pierce us to the bones.
But if no void existed, how could all these bodies, pray,
Find passage? Thou wilt see it could not happen anyway.
Again how is it that we see that some things will in weight
Others exceed, although in size they are no whit more great?
For if there in a ball of wool as much of body be
As in a ball of lead, each should of right weigh equally.
Because 't is body's property to press all matter down,
And on the other hand in void such pressure is unknown.
Wherefore with things of equal size the lighter of the twain
Shows clearly that it must the more of void in it contain:
While that which proves the heavier that more of body dwells,

And less of emptiness, within its bulk as plainly tells.
What therefore we our keenest power of reason have employed
To seek, exists in all things blent, and this we christen 'void.'

But here I must anticipate, unwillingly in sooth,
What certain folk allege, lest this divert thee from the truth.
Water, these say, yields to the push of all the finny kind,
And opens paths for them, because they leave a place behind
Wherein its parts, that first gave way, find room to meet again.
So other things may interchange positions, these maintain,
And move amongst themselves, although no void exist, nor space.
Know then that this whole system owns false reasoning for base.
For whither will the scaly tribes be able to proceed
Unless the waters first make way? or whither will indeed
The water go, whilst yet the fish are powerless to go by?
We either then to every thing must power to move deny,
Or else say that by Nature's hand is blent all things within
A void, through which each object gets its motion's origin.
Finally if two substances in contact chance to be,
And quickly spring apart again, 't is mere necessity
That air should wholly fill the gap these bodies leave behind.
But this, however fast it stream with swiftly-circling wind,
Will never in one moment's time entirely occupy
The space, but must one part at first, and then another, try

To seize, and so obtain of all possession by-and-bye.

But if, when first these bodies sprang apart, one make pretence
That this occurred because the air grew suddenly more dense,
He errs: for then a void was made which had no being till
That happened, whose result it was a prior void to fill.
Besides it is not thus that air's condensing work is done;
Nor, if it were, could air, I think, without a void alone
Draw itself thus together and make all its portions one.

Wherefore although thou may'st awhile by wordy captiousness
Delay, that void exists in things thou must at last confess.

And many arguments besides have I of this same sort
To mind thee of, if so I must thy slow assent extort.
But to a mind as keen as thine these traces light suffice
For thee to ascertain the rest without my more advice.
For as good hounds will follow up the mountain-roving boar
By scent until they find his lair with leafage covered o'er,
If once they have set foot upon his track with certainty;
So thou in matters such as these wilt have the sense to see
From step to step, and penetrate, how dark soe'er they are,
The lurking-places of the truth, until thou lay it bare.

But if thou harkest back one jot, or workest slovenly,
This, Memmius, in full soberness I plainly promise thee:
My honied tongue from out my breast's full treasury shall pour
Such ample draughts from well-springs which flow on for evermore,

That I do sorely fear that o'er our limbs old age's sloth
Will surely creep, and loose the bars of life within us both,
Before into thine ears my whole full wealth of argument
On any single point has been in measured cadence sent.

Now, to pick up once more the thread of what I lately said
That Nature, as she is, of two first elements is made
Is manifest: for bodies are, and void, as we have proved,
Wherein the bodies have been set, and each of them is moved.
For sense, which all men share, proclaims that body is without
Aught else. Unless belief in this be fixed beyond a doubt,
We shall not have a point to which we can in things obscure
Appeal, by mental reasoning to make opinion sure.
And further if no space there were nor room, which people call
The void, then there would be no place where bodies could at all
Be set, or could in any way or any-whither move:
The very point I made so clear a little way above.
Besides thou canst not mention make of aught the wide world through
Which, while distinct from body, yet with void has naught to do:
For this of some third element would be discovery.
For whatsoever comes to light must of necessity
Be something; and if touch therein, however light or rare,
Be found, 't will make addition great or small, so it be there.

To bodies' multitude, and so must with the rest abide.
But if it prove intangible, nor can on any side
Let anything from passing through, no matter whence it came,
'T will be the thing to which we give 'the empty void' for name.

Once more whate'er has being by itself will either do
Some act, or suffer some thing else to do some act unto
Itself, or else be such as things are done and carried through.
Well then to do and suffer, naught but body is employed;
To give the place for action is the property of void.
So granting void and body as two elements, 't is vain
To deem that in existence any third may still remain,
Either amongst the things one smells and touches, hears and sees,
Or those wherewith one gets acquaint by mental processes.
For all the things that own a name, thou'lt find, are properties
Of these two elements, or else are accidents of these.
A property is that which ne'er can cut itself adrift,
Nor can be sundered anyhow, without a fatal rift;
As weight in stones, as heat in fire, in water moisture is,
In every body power of touch, in void its touchlessness.
But serfdom on the other hand, and wealth, and poverty,
And liberty, and war and peace, and other things, whereby,
Coming or going, nothing is in essence changed at all,

These we are wont, as is but right, mere accidents to call.
Time also by itself has no existence. Facts alone
What happened in the days agone to sense of ours have shown,
As what is present now, and what will follow, thence is known:
So that no man can time perceive we surely must confess,
Save with respect to things that move, or rest in quietness.
When then they talk about the rape of Helen, and declare
That men of Trojan race in war were worsted, oh! beware
Lest they at all constrain us to admit that these events
Themselves exist; whereas the age of men, whose accidents
They were, by time has long been borne irrevocably hence.
Because one might more truly call whatever happened then
Accidents, either of the lands or of the Trojan men.
For after all, if there had not been then material
Of things, nor space nor room wherein things could be moved withal,
Then never had the fire by love of Helen's beauty bred
So fatally within the breast of Phrygian Paris spread,
And ruthless war's world-famous fights thereby illumined;
Nor had the wooden horse, to Troy that unsuspected came,
Wrapped through its midnight brood of Greeks all Pergamus in flame.
So that thou clearly mayst perceive that deeds, whenever done,
Have not, as body has, the power to be and stand alone:

Nor in thy reckoning may these be classed with void as one.
With better reason accidents thou mayest term them all
Of body and the place in which they severally befall.

Moreover bodies some of them are first-beginnings true,
And others from the confluence of these first forms accrue.
And those which first-beginnings are no force whatever may
Destroy, because their solid bulk must always win the day.
Although it seems right difficult of credence there should be
A single thing, 'mid all that are, quite solid bodily.
The thunderbolt of heaven can through the walls of houses pass
Like cries, or talking: iron turns in fire as white as glass;
Stones heated with excessive heat will soon asunder fly;
Gold's stiffness melts exposed to flame, collapsing by-and-bye;
The iciness of brass o'ercome by fire becomes as dew;
And heat and piercing cold alike can travel silver through,
For we ourselves have felt them cup in hand around the board
When bubbling water from above has thereinto been poured.

Thus far that nothing solid has been found in things is plain.
But since true reasoning thereto, and Nature's self, constrain,
Attend, I pray, while in a few short verses I shall tell
How there are things of solid bulk and indestructible:
Which, as we teach men, are the seeds, the first-beginnings too,

Wherefrom the total sum of things is fashioned, which we view.
In the first place since we have found the difference immense
Betwixt the twofold natures of our two first elements,
Body to wit, and space wherein all things are carried on,
'T is need that each should by itself exist, and quite alone.
For wheresoever vacant space, which we call void, exists,
There body is not, and likewise where body holds the lists
There empty void can by no means come: therefore there must be
First bodies formed of solid bulk without vacuity.
And then again because in things begotten void is found,
'T is need that solid matter should encompass it around:
Nor can a single object by true reasoning be shown
Within its body void to hide and keep it as its own,
Unless you grant that that which holds this in must solid be.
And that which thus can hold in check the void in things, you see,
Can nothing be but matter in close contiguity.
So matter then entirely formed of solid body may,
When all things else are cast abroad, remain the same for aye.
Moreover if no void at all nor empty space there be,
The universe must be compact; if on the contrary
Fixed bodies had not being which the place they occupy
Can throughly fill, 't would all become an empty void thereby.
Therefore in layers turn by turn are void and body laid
To make this universe of ours, because as I have said,

'T is neither wholly full nor void entirely. So there are
Some bodies which space fully filled from empty space can bar.
And these by blows that from without assail them cannot be
Broken to pieces; nor undone by aught that inwardly
Can pierce them, nor, if otherwise assaulted, can be brought
To nothingness, as we ourselves a while ago have taught.
Since it appears that nothing can be ever broken through
Without a void, nor shattered, nor by cutting split in two;
Nor can admit the foes whereby all bodies are destroyed,
Moisture, and penetrating cold, and fire, without a void.
And as each thing within itself does more of void contain
Less is its chance, when these assault, undamaged to remain.
So if the primal bodies are quite solid, as I say,
And throughly free from void, they must of course endure for aye.

Besides all this, if matter had not everlasting been,
Each several thing had long ago to naught returned, I ween;
And out of naught all things been born afresh, which now are seen.

But inasmuch as I have shown above that naught of naught
Can gendered be, nor aught begot again to nothing brought,
A deathless body to the first-beginnings must be due,
That things may at their latter end be sundered thereinto,
And matter thence may be at hand for making all anew.
So wrought in solid singleness the first-beginnings are:

Nor any otherwise could aught from age's wear and tear
Be kept through time unlimited things damaged to repair.

Again if Nature had not set some limit well-defined
To stop the breaking up of things, all shapes of every kind
Of matter had ere now been so reduced in ages past
By breakage, that no thing therefrom could e'er have been recast
Within fixed time, its utmost growth of being to attain.
For we can see that all things are less quickly formed again
Than shattered; so that what the long succession infinite
Of bygone years by violent dissundering had quite
Destroyed and broken all to bits, in all the time to come
Could never have been made afresh to perfect Nature's sum.
But now a certain limit has been fixed beyond a doubt
To dissolution, since we see all things renewed throughout:
And settled periods likewise have been assigned to each
According to its kind, wherein its prime of life to reach.

Next, granting that some bodies are, though infinitely small,
Of solid matter framed, we then can give account how all
Those of a softer sort, like earth and water, fire and air,
Can be composed, how each of them may severally fare:
Since objects once for all allow admixture of the void.
But if for first-beginnings soft things only were employed,
No explanation could be given, whence iron and the stout

Texture of flint stones could be formed: for utterly without
A groundwork of foundation their existence then would be.
So first-beginnings then are made strong in solidity
And oneness, by whose gathering the more compactly close
A thing becomes more tightly knit, and stouter toughness shows.
Again supposing there had been no final limit set
To breakages, for making things 't were necessary yet
That bodies should have lasted from eternity till now,
Which ne'er had been assaulted by the risk of any blow.
But since of fragile substance these by nature all consist,
'T were inconceivable that through all time they should exist
Harassed by blows innumerous, and that eternally.
Once more as limits have been set, as any one can see,
Of growth and maintenance to all according to their kinds;
And Nature by the strictest laws inviolably binds
Each of her creatures as to what it can and cannot do;
And naught is changed, but all remain immutable all through,
So far that in each breed of birds we regularly trace
The spots upon the body which distinguish all its race;
These must a body gifted with immutability
Of matter own. For if the first-beginnings e'er could be
By any method overcome and changed, 't would be a sheer
Thing of uncertainty what could, and what could not, appear,
And on what system bounded powers have been assigned to each,

And certain goals so deeply fixed that none beyond may reach.
Nor could all breeds the nature of their sires, as now they use,
Their very habits, ways of life, and movements, reproduce.

And now moreover inasmuch as each extremity
Is of so small a body that our visual faculty
Cannot detect it; these must needs devoid of parts exist
And be of nature least, nor could in singleness subsist
In time gone by, nor e'er in time to come can be alone;
Because they are but portions of another thing: so one
Part first, and after more and more alike in structure meet
And grow compact, the nature of a body to complete.
And since these cannot by themselves subsist, they clearly must
Cling to some body, whence they can nor riven be nor thrust.
So wrought in solid singleness are first-beginnings found,
Compact, by smallest particles together tightly bound:
Not formed by gatherings of these existent previously,
But rather mighty in their own eternal unity.
And Nature suffers not that these should minished be or rent
At all, but keeps them safe as seeds new bodies to present.
Besides unless there be a 'least,' the smallest bodies sight
Acknowledges will be composed of portions infinite;
Because the half of any half will evermore admit
Halving again, and means will lack to put an end to it.

And then betwixt the sum of things and least thing where would be
The difference? 'T would disappear. For howso thoroughly
The sum of things be infinite, still things that smallest are
Would of parts infinite consist in manner similar.

But since sound reason here protests, refusing to allow
The mind to count this true, thou must to her decision bow,
Confessing that some bodies do exist which parts have none,
And are in Nature made the 'least'; and, after this is done,
That these are truly solid and eternal must confess.

Moreover if it were the wont of Nature, authoress
Of all things, to insist that all should be dissolved into
Their smallest parts, she would not have the power to make anew
Aught out of them: for bodies which are dowered with no parts
Must lack the attributes with which begetting matter starts,
Weight, unions of whatever sort, encounters, movements, blows,
All the machinery in short whereby creation grows.

For this cause those who deemed that fire was the material
Of all things, and that fire alone existence gave to all,
Seem to have gone from reason's truth exceeding far astray.
And Heraclitus foremost sets their battle in array,
Renowned from his obscurity of language more with Greek
Triflers, than with their men of weight, the honest truth who seek.
For argument more pleasure, aye and wonderment, affords

To fools, when hidden in a cloud of complicated words;
And that they dub the very truth, which tickles daintily
Their ears, tricked out with ornaments of smart verbosity.
For, I would ask, how can things be so very different,
If all are fashioned out of fire alone and quite unblent?
Because it would not help a whit for heat to be compressed
Or rarified in fire, if all its particles possessed
The self-same character as fire exhibits as a whole.
'T would burn more fiercely as its parts more close together roll,
More languidly as these are more dispersed and scatterèd:
But any further change than this can enter no man's head
As possible; far less that all the vast variety
Of Nature's works could come from fire's denseness or rarity!
Another point. If they allowed that things admixture bear
Of void, then fire could be condensed or left at pleasure rare.
But spying much that tells against their theories herein,
They shrink from letting simple void a place in Nature win;
And lose their road entirely in alarm at one steep hill;
Nor know that on the other hand if void were, as they will,
Shut out, creation would become compressed, and all things grow
One body, which could nothing from its surface quickly throw;
As heat-begetting fire both light and warmth can radiate,
Showing thee that it is not of close-fitted parts create.
But if perchance these folk believe, on quite another scheme,

That fire is quenched in union, and like other things may seem ;
There follows, if this process they should constantly repeat
In all directions, sure enough a total end of heat :
And all things would from naught be made, if any then were found.
For whensoever aught in change exceeds its proper bound,
This causes instantaneous death of what it was before :
So that there must be somewhat still of that their fiery store
Maintained, lest all things utterly to nothing should be brought,
And Nature's stock be forced afresh to bourgeon out of naught.

Now therefore, since there doubtless are some bodies of a frame
Assured, which whatsoe'er may hap, keep natures still the same,
By whose departure or access or altered ordering
Things change their character and each becomes another thing,
'T is plain enough to see that these first bodies are not fire.
For then 't would make no odds though some should happen to retire,
And others take their place, and some in novel rank be ranged,
If yet the attribute of heat remained in all unchanged ;
For all they could produce would be fire only, I suppose.

But this, I take it, is the case. There are some bodies, whose
Encounters, movements, order, shape, positions, tend to light
In certain cases fire : just change their order, they are quite
Altered in nature, and no more resemble fire at all,
Nor any other thing which can present corporeal

Form to our sight, or coming nigh can rouse our sense of touch.
Again to say that all things are but fire, and only such
May in the number of true things correctly counted be,
As this same fellow says, appears downright insanity.
For arguing from sense against this sense himself offends,
Upsetting that whereon the truth of all belief depends,
Nay whence what he names fire was brought to his own cognizance.
For he believes that sense perceives fire quite beyond mischance,
But sees not all the rest of things though not a jot less plain.
All which appears to us to be as groundless as insane.
For what shall be the arbiter? To what can reference
Be better made, for branding truth and falsehood, than to sense?
Nay further, why should any one rather eliminate
All else, proclaiming fire alone the one true thing create,
Than deny fire's existence, and keep something else instead?
Either assertion would betray an equal want of head.

They therefore who with fire alone begin and end the list
Of matter, deeming that its sum can out of fire subsist;
And they who of creation's work have reckoned air the one
First origin; they too who think that water can alone
Make all things by itself, or else that earth can fashion all
Unaided, and can own all sorts of forms material;
In common very far away from truth appear to fall.

Nor are they nearer right who make first elements a pair,
By coupling earth and water, or combining fire with air:
Nor they who hold that all the things that are arise from four
Sources; earth, water, air, and fire, completing Nature's store.

Amongst all these Empedocles of Akragas is first
In honour, whom that isle within her realm three-cornered nursed,
Round which the deep Ionian sea in mighty surges roars,
Sprinkling from waves of olive-grey white foam-flecks on her shores.
There from her fruitful meadow lands with rapid, restless, tides
A narrow strait of brine the coast of Italy divides;
There is Charybdis' vasty pool; there Etna's muttered wrath
Gathers in pent up flame, and threats once more on ruin's path
With all her might to vomit forth her bursting floods of fire,
Once more to bid her lightnings high as heaven itself aspire.

Now though this famous region seems in many ways to be
Worthy of human wonder, and a land that folk should see,
So rich it is in all good things, in might of men so strong;
Yet nothing than Empedocles thereto did e'er belong
More holy or illustrious or wonderful or dear.
Yea and his godlike intellect in poetry so clear
Resounds abroad, expounding his world-famed discoveries,
That we can scarce believe a birth from mortal seed was his.
Still even he, with those above referred to—far behind,
Far smaller than himself, in gifts of character and mind,

Though they have many points with skill well nigh divine explored,
And from their hearts' most sacred place have uttered many a word
More holy, and assuredly more truly reasoned far,
Than answers from the laurelled stool of Phœbus' priestess are,—
As to the origin of things encountered not a small
Mishap; and, as themselves were great, so great was there their fall:
Firstly because, with void shut out from Nature, they admit
Movement; allowing organisms not hard but loosely knit,
Like air and fire, the sun, the earth, and living things and trees,
And yet refuse to mingle void with any one of these:
And next because they utterly deny that any bound
Is set to severance of things, or any reason found
To limit breakage, or to show that any 'least' exists.
Whereas we see that everywhere extremity consists
In being that which shows itself as smallest to our sense;
Whence thou mayst gather that, as things beyond thy competence
Of sight possess extremities, a 'least' abides therein.

Moreover since they say that first-beginnings may begin
Existence soft, and these, we see, are born and dowered with
A body in its every part dissolvable by death,
The sum of things to nothing would of need ere long be brought,
And Nature's store would have to grow afresh and out of naught:
And how far this is from the truth thou long ago wert taught.

Lastly their elements will oft reciprocally fight

And harm each other, so that they are either slain outright
At meeting, or will fly apart, as, when wild storms arise,
Lightnings and rain and winds are riven asunder through the skies.

Finally, if all objects from four elements were made,
And back again must thereunto dissolve and retrograde,
Why should we bodies' source in these four elements discern,
Rather than theirs in bodies see by just the other turn?
For they are got alternately, and interchange their whole
Nature and look, since on its course time first began to roll.
But if thou think'st perhaps that earth unites with fiery heat,
And that the breezy air of heaven and water's moisture meet,
In such a way that nothing of their character is changed,
'T is clear that on such terms as these no scheme could be arranged
For forming aught alive, or not endowed with life like trees.
Since each would manifest in such ill-massed congeries
Its several nature; air as air would still be seen as plain
Though mixed with earth, and fire would fire with water still remain.
But for begetting things there must in first-beginnings be
A character of secret and unseen vitality,
Lest aught stick out and stop the way, or otherwise prevent
Aught that is made from getting its full nature's complement.
These fellows too repair to heaven, and seek the fires that there

Abide, and first they say that fire transmutes itself to air,
And next that rain is born of air, and earth is made from rain;
Then that from earth things travel o'er the same road back again
To water first, then afterwards to air, to fire at last;
And that this ceaseless interchange goes on from ages past
For aye, from heaven to earth, from earth to heaven's star-spangled blue.
All which true first-beginnings may by no arrangement do;
Because at least some part of them from changes must be free,
Lest all things should be utterly reduced to nullity:
For anything that in its change the bound prescribed transcends,
By the mere fact of passing it its former being ends.
Therefore since these four elements, of which we spoke just now,
Come, as they say, to utter change, of other stuff, I trow,
Our first-beginnings must consist, which nowhere can be brought
To change, lest all the universe come utterly to naught.
Were it not better to assume that there are bodies wrought
Endowed with such a nature that, though fire at first they frame,
If some few atoms added be and some withdrawn, the same
May fashion air by some new kind of movement or of range,
And all things else in this same way may mutually change?

"Nay but", thou sayst, "the plainest facts most evidently show
That into air and out of earth all things by feeding grow:

And if the weather favour not with seasonable showers,
Till woods sway to and fro beneath the rain-storm's soaking powers;
And on his part the sun afford not warmth whereby they thrive,
Nor crops, nor trees, nor man, nor beast, could anyhow survive."
Most true: and so if we were not by solid victuals fed
And water soft, our life itself through bulk diminishèd
From every bone and sinew would by slow degrees ooze out.
For we draw help and nourishment from certain things no doubt;
And this or that from other things its source of growing wins.
Because in sooth in many ways the same first origins
Are gathered into many things, and thus the different
Creatures from things as various derive their nutriment.

To these same first-beginnings too it often matters much
What, and in what reciprocal positions, each may touch,
And what impulses, given or got, retard or haste each one.
Because the selfsame elements compose the sky, the sun,
The sea, the land, and streams, and crops, and trees, and living things;
But mix not in one way with all amid their wanderings.
For even in this verse of ours thou see'st at random strown
Letters enough, which many words as commonable own,
Although thou must no less allow that never line or word

Thereby is made in utterance or meaning to accord :
Such power does altered place alone to elements afford.
But such as first-beginnings are of matter own far more
Means of creating objects of all sorts in ample store.

Now let us look at what the Greeks call 'Anaxagoras'
Homæomeria,' for which our needy language has
No term to render it aright in our own native speech ;
Although in words 't is no hard task the thing itself to reach.
First then 'homæomeria' of objects in his scheme
Implies that bones to him of bones minutely tiny seem
Composed, and in like manner flesh by him is understood
As being formed of smaller bits of flesh, and likewise blood
As made of many little drops of blood together rolled.
So too he thinks that gold consists of tiny grains of gold,
And that to fashion earth a host of lesser earths conspire,
And lesser waters water make, and lesser fires make fire :
Deeming in every thing beside the selfsame plan employed.
And yet he no allowance makes in any part for void
To be in things, nor owns that all division has its bounds.
Wherefore he seems to me to be on both of these two grounds
As far astray as those of whom we spoke a while ago.

Besides his first-beginnings far too weak a structure show :
If they at all beginnings are which in consistency

Are wholly like the things themselves, and suffer equally
From hurt and overthrow, with naught from death to rein them back.
For which of them will stand against a vigorous attack,
And flee the grasp of fate, when 'twixt destruction's very teeth?
Will air or fire or water, blood or bones, escape from death?
Not one of them, I trow, when each will just as throughly be
And equally condemned to die, as all the things we see,
O'ermastered by some foreign force, perish before our eyes.
But that things may not fall away to naught in anywise,
Or grow from naught, I make appeal to proof already given.
Besides, since bodies aye on food have greater grown and thriven,
We have sure evidence that veins, and blood, and bones, and force
Of sinews grow by matter drawn from quite an alien source.
But if perhaps they choose to say that all our nutriment
Is mixed in substance, holding in itself small bodies blent
Of sinew, vein, and bone and all, and even drops of blood,
'T will thus result that every sort of dry and liquid food
Must be considered as composed of things unkindly, bone
And sinew, blood and serum, mixed by miracle in one.
Moreover if all bodies, which out of the earth arise,
Are in the earths, then earth itself must needs consist likewise
Of matters wholly alien, which from out these earths may grow.
And this same rule may be applied to all the things we know.

Because if ashes, smoke, and flame in logs of wood subsist,
Then logs of wood must needs of strange first elements consist:
And things that earth sustains and grows must needs be fashioned all
Of alien forms themselves begot from strange material.

Here there is left a certain small loophole of 'latency,'
And Anaxagoras at once adopts it, saying he
Holds all things to be 'latently' in bodies mixed, but one,
And that whereof most parts are blent in each, to show alone
From being close at hand and in the foremost place in sooth.
But this is very far removed from reason and from truth;
For then 't would be the proper thing for grains of corn, when ground
By the relentless energy of millstones, to abound
In signs of blood or aught that gets from human bodies food:
And one stone on another rubbed should oftentimes exude
Gore as of slaughtered cattle. In the same way grasses ought
Sweet drops of water to give out, with that same flavour fraught
Which milk gets from the udders of our flocks of woolly kind.
Nay and in powdered clods of earth we ought of wont to find
Grasses of every species, and grain, and leaves, that lie
Latent, dispersed amid the earth, too small for naked eye:
Smoke finally, and ashes too, and tiny sparks we should

See latent, when 't is broken up, in every piece of wood.
But since that none of this occurs from fact is evident,
We may assume that alien things in bodies are not blent.
Though many seeds in many ways must ever latently
Be mixed in all, and these are held as common property.
"But," thou wilt say, "it comes to pass that midst high mountains oft
The stately trees, that side by side toss their tall heads aloft,
Rub one another 'neath the stress of southern winds that blow,
Until with wreaths of kindled flame their boughs are all aglow."
I grant it. But there is no fire subsisting in the trees.
Yet are there many germs of heat about us: and where these
Forgather through attrition, they set all the woods ablaze.
But if a latent flame were made, as yonder teacher says,
To lurk in woods, it ne'er had been long hid; the woods had burned
Without distinction, every tree had been to ashes turned.
Now therefore what I said just now must surely to thine eyes
Seem plain, how much it to our first-beginnings signifies
With what, and in what place, they may in combination live,
And what the movements are which they at times or get or give:
And how the same, but slightly changed, can equally produce
Fire and a fir; exactly as the very words in use
For naming them we by almost the selfsame letters frame,

Although in saying fir and fire the sound is not the same.
If, lastly, thou should'st deem that each of all the things now seen
So plainly could not have been made, unless there first had been
Bodies endowed with attributes precisely like itself;
By this plan first-beginnings all are put upon the shelf:
For 't would result that these must shake with fits of laughter too,
And oft with floods of briny tears both cheek and chin bedew.

Come now, and learn what yet remains; take heed and clearly hear.
I know full well how very dark my subject must appear:
But hope, the mighty hope of praise, with thyrsus-staff my heart
Has sharply struck, the sweet love of the Muses to impart
To my poor breast, till strong of soul, by this inspirited,
I wander through their pathless realm, where never human tread
Has worn a track before: I love the virgin fountain-head
To reach and quaff; 't is my delight new kinds of bloom to cull,
And thence to weave me for my head a garland wonderful,
Whence never Queen of song has yet o'ershadowed mortal brow.
Chiefly because of mighty themes I treat, essaying how
From superstition's cramping bonds the mind of man to free:
Next since on subjects so obscure with such lucidity

I frame my verses, touching all with grace of poesy.
And this no whit inconsonant with reason will appear.
For just as doctors round the rim of cups are wont to smear
Sweet juice of yellow honey, when they tax their art to try
To get their nasty absinth down the throat of infancy,
And so the unsuspecting years of babyhood beguile
Lip-far at least, the bitter draft of wormwood-juice the while
The patient gulps, not taken off through being taken in,
But finding rather health and strength thenceforth afresh begin:
So I too now, because abroad my course of argument
Seems somewhat harsh to those who ne'er a thought thereon have bent,
And common people shrink away in horror, wish to thee
My system to expound in suave Pierian minstrelsy,
Touching it with the sweetness of the Muse's honied strain,
In hopes by such a plan thy full attention to retain
Fixed on my verses, till thou look'st with understanding view
On all things' nature, and perceiv'st how each to shaping grew.
But inasmuch as I have taught that bodies most compact
Of matter ever flit about unconquered though attacked;
Come now let us discover if there any limit be
Set to their sum, or no; and at the same time let us see
Whether that emptiness, or space, or room, which we have found
In which all things go on, has got in fact a certain bound,

Or stretches wide its vasty depths, a measureless profound.
Well then the sum of things that are, where'er our travels wend,
Is infinite; for otherwise it needs must have an end:
And that there cannot be an end of anything is clear
Unless there be some thing to hedge it in; and that appear,
Further than which the nature of man's sense cannot progress.
Now since beyond the sum of things there can, as all confess,
Be naught, this has no end, and lacks all limit and all bound.
Nor does it matter whereabouts a man may choose his ground:
For wheresoe'er he take his stand, alike on every side
Space undiminished still is left indefinitely wide.
Besides, if for the nonce we just assume the whole of space
To have a limit, and a man to run and take his place
On its extremest border, and a wingèd spear to throw,
Dost thou suppose that this, when hurled with all his strength,
would go
On to its aim afar through air like any other spear?
Or dost thou think that aught to stay its flight would interfere?
One of these two alternatives thou canst not choose but take;
And both alike preclude escape, and thy confession make
Imperative, that wide without a bound the 'whole' is spread.
For whether there be aught whereby it is prohibited
And stopped from going where 't was sent to reach a destined aim;
Or whether it speed forward; from an end it never came
In either case: so, following this up, I ask, where'er

Thou place thy furthest boundary, "How then about the spear?";
Till it results that nowhere can such border-line be set;
For opportunity of flight makes flight go further yet.
Again we see that thing by thing is bounded everywhere;
Air is the mountains' boundary, the mountains limit air,
Sea is earth's border, earth sea's end: but nothing e'er was found
Outside itself in any way the sum of all to bound.

Once more, if all the whole expanse of Nature's sum between
Fixed boundaries on every side encompassèd had been,
And limited, then matter's store by its intrinsic weight
All to the lowest point therein had fallen precipitate.
Then naught beneath the covering sky could have been carried on;
Nay there had been no sky at all, nor any shining sun.
Since the materials of all together had been thrown
Into one heap by ages of eternal settling down.
But now in fact the bodies of our first-beginnings get
No rest, because there nowhere is a lowest limit set
Where they might meet and find, as 't were, a final resting place.
All things are carried on throughout the boundless realms of space
With ceaseless motion: bodies made with swiftest speed to go
Are from the infinite supplied, aye even from below.
Therefore the character of void, the endless depth of space,
Is such, that brightest lightnings in their peerlessness of pace

Might strive for time unending to run through it all in vain,
Nor by their travel cause that aught the less should still remain.
So vast a room, on every side entirely free from bound,
Lies open to the wanderings of bodies all around.

Moreover, lest the sum of things bounds for itself should make,
Nature herself has deemed it fit precaution due to take,
Compelling body void to bound, and bounding it by void;
So that she either makes by these, alternately employed,
Her whole unlimited; or else one of the twain, unless
The other end it, of itself is simply limitless.
For had there any limit been at all to body given,
Then neither sea, nor earth, nor yon resplendent realms of heaven,
Nor any race of mortal kind, nor gods' immortal power,
Could have subsisted through the brief duration of an hour.
Because the store of matter, from cohesion thrust away,
Had been throughout the mighty void dissolved and borne astray:
Or rather ne'er had been condensed so far as to create
Aught, being powerless to unite when so far separate.
For certes not of purpose were the first-beginnings brought
Each into proper order by sagacity of thought;
Nor did they any compact make what movements to go through.
But being many in themselves, in many manners too
Shifted through endless time and space, and driven by harassment

Of blows, each every kind of move and meeting as it went
Essayed, until at last they fell into such circumstance
As that thereout there grew the sum of things which meets our glance:
Which, thence through many lengthy years preserved, has prospered well,
When once it had commenced a course of motions suitable,
Causing the streams with ample floods of water to supply
The greedy ocean, bidding earth renew her progeny
Warmed by the sunshine's heat, and tribes of living things to rise
And flourish, and those fires to live which glide along the skies.
And this by no means could occur, unless from boundless space
An endless store of matter could spring up to take the place
Of bodies that in course of time are lost or worn away.
For just as living things deprived of food will day by day
Lose flesh and dwindle, so the rest of nature must decay
To instant dissolution, if it cease to be supplied
With matter from its proper course in some way turned aside.
For blows inflicted from without can never keep intact
From loss whatever sum of things has once become compact.
They may smite often on a part and cause delay, until
Fresh bodies can arrive in time the vacancy to fill:
But still sometimes they are compelled to spring aback, and so

Allow things' first-beginnings room and time wherein to go
Away, from their cohesion borne to perfect liberty.
So bodies must in multitudes spring up incessantly:
Yea, e'en these very blows themselves, that cease not, to provide
Matter must needs in boundless stock subsist on every side.

Herein, my Memmius, one belief pray banish from thy soul;
That all things press to what they call the "centre" of the whole
And so this world of ours without external blows can stand,
Its highest and its lowest parts held fast on every hand,
Because towards their central point they all of them are pressed—;
If thou canst deem that anything upon itself can rest—;
And heavy bodies underneath the earth are upward thrown,
Making the earth their resting-place, though standing upside down,
Just like the likenesses of things which we in water view.
In the same way they argue that there living creatures too
Walk topsy-turvy, yet no more into the outspread sky
Below them tumble off from earth, than we ourselves can fly
Bodily up to yonder heaven above us if we please.
So too, they say, folk there behold the sun when here one sees
The midnight stars, the hours of light and darkness sharing thus,--
Spending as night what here is day,—alternately with us.
But baseless error has contrived for fools these empty dreams,

Because they have embraced and hold wrong principles, meseems;
For there can be no centre, where the void spread all around
Is limitless; and, even if a centre could be found,
Would this be stronger reason why a thing should there remain,
Than any other which might tend to drive it off again?
For room and space, which we call void, wherever it may be,
Through centre or no-centre needs must always equally
Give way to weighty bodies which their movements thither bear:
Nor is there any spot wherein a body coming there
Can throw away the force of weight, and in the void stand still:
Neither will void have power to hold a body up, but will,
As its true character demands, eternally give way.
So not by such a means as this in close cohesion may
Bodies be kept, constrained by love of centres, as these say.
Besides as they do not pretend that all things, which to birth
Are brought, towards a centre press, but only those of earth
And water, such as seas, and streams that down the mountains roll,
And all that in a way as 't were are held in earth's control,
Asserting on the other hand that atmospheric air
And burning fire are carried from the centre everywhere:
And that from hence the heavens are bright with twinkling stars on high,

And hence the sun's own fires are fed amid the azure sky,
Because heat from the centre fled collects itself up there;
And further that the topmost boughs of trees could never wear
Their crown of green, unless from earth kind Nature found for each
Its food, from trunk to branch and twig by slow degrees to reach;
That, wandering in error's paths, they use an argument
Which flatly contradicts itself is very evident.
Since all their fancy schemes are built on unsubstantial ground.
For inasmuch as I have shown that void can know nor bound
Nor limit, but spreads measureless abroad on every side,
Similar reasoning requires that matter should abide
At hand in infinite supply at need to be employed,
Lest the world's walls should all at once asunder through the void
Immense go flying loosely in the style of wingèd flame,
And all beside should follow suit at once, and do the same;
Lest the heaven's inmost regions should fall headlong from above,
And earth should from beneath our feet with violence remove,
And, mingled with the wreck of heaven, a mass of ruin, sweep,
Destroying all things in its course, adown the empty deep:
Till in a moment's time of all the world were left no trace,
Save viewless first-beginnings in a void expanse of space.
For on whatever side thou first of fresh material
Discernest lack, that part will prove the gate of death for all:

All matters countless forms will cast themselves abroad from thence.

These things if thou wilt master once with proper diligence,
To lead thee onward in the task will need but little work;
For one thing makes another clear: nor shall the blinding murk
Of midnight rob thee of thy road, nor cover from thy sight
Nature's last secrets; fact on fact will shed so strong a light.



BOOK II.

OF FIRST-BEGINNINGS.



BOOK II.

'T is sweet, when on the mighty sea the storm winds rouse the main,
To watch from shore another toil with all his might in vain:
Not that the hurt of others can to us delightful be,
But that we like to look on ills from which ourselves are free.
Sweet is it too to view in line the mighty strife of war
Arrayed across the plains when we from danger stand afar.
But nothing more delightful is than Wisdom's quiet steep,
Set up on high and walled about with learning well, to keep;
Whence one may gaze on other folk adown, and see them stray
Hither and thither, wandering in search of life's true way.
Competitors in character, rivals in rank, each tries
Day after day, night after night, by toil's excess to rise
To riches' topmost height, and make the Commonwealth his prize.

Oh! hapless mind of human kind! Oh! bosoms blind, alas!
In what deep life-long darkness, 'mid what dangers dire, men pass

This time of ours, such as it is! And will they not perceive
That Nature craves not for herself aught, save that pain should leave
The body from its presence free, and that the mind be fed
With pleasant feelings, far removed from carefulness and dread?
Therefore we see that Nature for the body's sake has need
Of things but few, such as have power distress to supersede,
And in so doing much of true enjoyment to provide.
Nay for the most part she herself is not dissatisfied,
Though no boys' statues wrought of gold along the chambers stand
Grasping a lamp that carries fire in each upraised right hand,
That ample light they may afford to banquets held at night;
Nor all the house with silver sheen and glints of gold be bright,
Nor gilt and fretted roofs give back the notes of the guitar;
If still upon the tender grass, where streams of water are,
Men, laid at length beneath the boughs of some high-arching tree,
At little cost refresh themselves together cheerfully;
Most chiefly when fine weather smiles, and when the time comes round,
That yearly strews with blossoms gay the green grass-mantled ground.
Not sooner from thy body will the fever hot as fire
Depart, if in embroidered robes or purple cloth of Tyre
Thou toss, than if thou hast to lie in commoner's attire.

Wherefore, since we may bodily no jot of profit gain
From wealth amassed, or noble birth, or fame of widespread reign,
We may conclude these do no good (for this might still remain)
To human minds. Unless perhaps when swarming o'er the plain
Of Mars thou seest thy legions raise war's mimic pageantry,
Supported by a strong reserve and force of cavalry,
And draw'st them up in armour decked stirred by one common heart,
Affrighted at the view thy false religion's fears depart,
Awestruck themselves, from out thy soul, and dread of thy decease
Then leaves thy breast untenanted, and gives from care release.
But since such thought were laughable and worthy scorn, we know,
For in good sooth the fears of men, the cares that haunt them so,
Stand in no awe of clash of arms or missiles' cruelty,
But overbold 'mid crownèd kings and lords of high degree
Their traffic ply, nor reverence the levin-gleam of gold,
Nor purple garments' brilliant sheen in any honour hold:
To deem these ruled by Reason were no doubt more near the mark;
Especially when all our life is toiling in the dark.
For just as boys at every noise begin to quake for fright,
When blinded by the dark, so we, albeit in broad daylight,
Are scared from time to time by things no worthier of fear
Than those which frighten children in the dark as coming near.

So then this dread and darkness of the mind no solar ray
Is needed to disperse, not yet the dazzling darts of day,
But Nature's face and Nature's law must clear it all away.

Come then; and by what process its begetting bodies get
The various forms of Matter, and begotten soon upset;
And to compel them thus to do what forces are employed;
What given speed they travel with athwart the mighty void;
I will unfold: remember thou to give my words good heed.
Now Matter is not in itself compact, in very deed
Cohering, since each thing we see grows smaller by degrees;
And all ebb, as it were, away in course of centuries
Before our eyes, till sheer old age withdraws them out of sight.
But since no less the sum of all remains unaltered quite,
It follows that the particles which quit each object so
Minish the one they quit, but add to that to which they go,
And that compel to fade and this with fuller bloom endue;
Yet there abide not. Thus the sum of things is made anew
For ever; thus too mortals live in bonds reciprocal,
And whilst some peoples greater grow, others decay and fall;
And in a little time each race of living things is gone,
And, just like runners, hands the torch of life to others on.

Now if thou deem that any first-beginnings cease to move,

Yet ceasing can of fresh unrest in others parents prove,
Thou goest from true Reason's road astray, and very far.
For, since they wander through the void, all first-beginnings are
Of mere necessity borne on, or by the weight they own,
Or by another's blow perchance, for oft in moving down
They meet and clash, and so it haps they spring right suddenly
Apart: and this no marvel is, for hard exceedingly
They are through solid weight, and nought obstructs them from the rear.
And that all Matter's bodies toss and cease not may more clear
Become to thee, remember how in Nature's wilderness
No bottom is, nor has she place where her first substances
May stop; for endless is the realm of space, and measureless.
And that it yawns without a bound, beneath, around, above,
I showed at length, and Reason sure has been at pains to prove.
So, seeing this is ascertained, no wonder there is found
For its first bodies in the depth of void no resting-ground;
But they, their various movements forced for evermore to keep,
Some o'er a greater interval after colliding leap,
And other some but little way are by their striking cast:
Such then as have in contact been once brought more close and fast,
And afterward but little space recoil apart,—entwined
By mutual mingling of their forms which each to other bind,—

Fashion the sturdy roots of rock, the bulk intractable
Of iron, and such bodies as thereto are semblable:
These, although few, still wander through the great void on their course.
The residue spring further off through their collision's force,
And across greater space rebound; and therefore these supply
The slender air, the sun that shines so brightly in the sky.
Beside these bodies not a few through the great void there stray,
Which from the gatherings of things have clean been cast away,
Or, once let in, have failed to make their motive powers agree.
Nay while I speak of this, its show, its semblance visibly
Is happening before our eyes for ever, evermore
Is hard at hand. For look, when through the shuttered casements pour
Into our homes' dim rooms the sun's clear rays of searching light,
How multitudes of tiny forms come instantly to sight
In empty air, and in the sheen of those same rays commence
To mingle in a thousand ways, and make as if pretence
In ceaseless struggle, seeming now to attack, and now retreat,
In troops for battle's conflict aye without a pause to meet:
So that from this thou may'st conceive what sort of thing it is
For first-beginnings aye to toss in void's vast distances.

For in some sort of mighty things a little thing may give
Example, pointing out the path at knowledge to arrive.
Wherefore the more 't is meet that thou shouldst scan with mental gaze
Those bodies, whose turmoil is seen amid the sunbeams' rays;
For these disturbances suggest there being in their rear
More movements too of matter, than in evidence appear:
Since thou wilt many a mote observe which, urged by hidden blows,
Alters its course, and back towards its old position goes,
Hurrying this way now, now that, in all directions too.
Know that this straying is in all to first-beginnings due.
For of themselves the very first-beginnings are bestirred,
Then those whereon some contact slight a body has conferred,—
Which as to powers, as 't were, to first-beginnings are most like—
Invisibly are moved by these, when they upon them strike:
And they in turn run foul of things of rather larger size.
From first-beginnings motion thus derives its early rise:
Until before our senses by degrees it comes, and we
Observe those motes in movement, which in sunshine we can see;
Yet by what blows this comes about appears not openly.

And now what gift of motion swift on Matter's bodies is
Bestowed, my Memmius, thou may'st in few words perceive from this.

When first the earth by rosy dawn's fresh-sprinkled beams is lit,
And birds of every feather through the pathless woodlands flit,
Filling the world with liquid song that floods the yielding air,
How suddenly the risen sun on such a morning fair
Is wont to clothe the landscape o'er, and bathe it in his light,
Is evident to all of us, made manifest by sight.
And yet the warmth the sun emits, his brilliance so serene,
Travel not through an empty void, and therefore must, I ween,
Go slower while they cleave apart each atmospheric wave.
Nor one by one do particles of heat their passage have,
But move in tangled companies, to one another tied,
So that they pull each other back, and all the while outside
Are sore withstood; and therefore must at slower speed progress.
But first-beginnings, which consist of solid singleness,
Because they travel through the void of emptiness, and none
Obstructs them from without, and they, in every portion one,
Are borne with all their might along the course they have begun
Forward, are bound assuredly in quickness to outrun,
And to be borne more swiftly than, the beams of any sun:
Nay and to traverse in the same while many times the space
That sunshine pierces when it folds the heavens in its embrace.

Still there are certain somebodies, of Matter knowing naught,—
Who never patiently enquired how first-beginnings wrought,

So as to see the plan by which each thing is governed still,—
Who contradict, believing that without the Gods' high will
Nature with all her toil could ne'er adapt to human wants
The changes of the time of year, the growth of fruiting plants,
And other things which mortals are persuaded to pursue
By heavenly Pleasure, life's best guide, herself their escort, who
Coaxes them to perpetuate their kind by offices
Of Venus, lest the human race should perish. But when these
Feign that the Gods have all things formed for sake of men, they seem
From reason's truth in all respects backsliders, as I deem.
For were I wholly ignorant what first-beginnings are,
E'en from the very system of the heavens I still should dare
To demonstrate, with many a point beside to allege in aid,
That nowise has the nature of the world for us been made
By power divine; it stands so full of blemish everywhere.
All which to thee, my Memmius, I will later on make clear.
But now of movement what is left to tell of let us hear.

For this, I take it, is the place a further quality
Of these same things to teach to thee; that nothing bodily
Can upward by inherent force be borne or upward move:
Lest fiery bodies should herein a source of blunder prove.
For these are with an upward bent begot, and increase so

Achieve: and gleaming grain and all things planted upward grow
Although their weight with all its might would always press them down.
Now where a fire leaps up upon the roofs our homes that crown,
And with its tongues of rapid flame beams, timbers, all, devours;
Deem not it does this of itself without compelling powers.
'T is just this way when from a limb of ours the blood let out
Gushes straight up, and leaps aloft and scatters gore about.
Or hast thou ne'er beheld the force wherewith a log of wood
Even soft water will throw up? The deeper in the flood
And straighter we with many hands have soused it might and main,
More eagerly the flood rejects and jerks it back again,
So that for more than half its length it springs above the stream.
And yet each one of all these things beyond a doubt, I deem,
Would downward through the empty void be borne if left alone.
Therefore it must be thus that flames, by pressure upward thrown,
Acquire the power to rise athwart the atmosphere, although
Their weight would struggle of itself to drag them down below.
Hast thou not seen how o'er the sky the torches of the night,
Flying on high, draw after them long trains of blazing light,
Whithersoever Nature's law their proper path has given?
Or watched how stars and fire-balls oft fall down to earth from heaven?

The sun himself dispenses from his zenith in the sky
His heat on every side, and sows the fields with brilliancy:
Therefore the sun to earthward aye bends down his warming beams.
Thou seest how lightning too across the slanting showers gleams,
And now on this side, now on that, fires torn from cloudy birth
Course to and fro. The force of fire falls commonly to earth.

Another matter hereanent I fain would have thee know;
That, while first bodies through the void straight down are made to go
By their intrinsic weights, at times and spots uncertain they
From their true courses turn themselves a little bit away,
So far that we the move a change of equipoise may call.
Since if they were not wont to swerve aside, then downward all,
Like drops of rain, for ever through the void profound would fall;
And 'mongst our first-beginnings no collision had been wrought,
No blow been struck: so Nature would have ne'er created aught.
And now if any man believes that bodies of more weight,
Since through the void they travel at a somewhat quicker rate,
Can from above come down upon the lighter, and beget
Collisions, which might movements make more reproductive yet,
He from true reason's road afar is straggling unaware.
For things that through the water pass, or through the thinner air,
Must in proportion to their weight accelerate their fall

Of need, because the water's bulk, the thinness natural
To air, have not the strength to stop all bodies equally,
But quicker yield to greater weights, as overcome thereby.
Whereas mere void on th' other hand has means of hindering
No how, in no direction, and at no time, any thing;
Nay, as its very nature prompts, persists in giving way.
Wherefore all things in motion set, howe'er in weight they may
Differ, at equal speed must through the restful emptiness
Be carried, so that heavier things are always powerless
On lighter from above to smite, and get by blows alone
Movements of varied kinds through which all Nature's work is done.

Therefore 't is need that bodies swerve, I say repeatedly,
A little, just the least wee bit, lest we should seem to be
Champions of slanting motion, which reality denies.
For this in evidence we see set forth before our eyes,
That of itself no sort of weight can e'er obliquely go,
When falling headlong from above: this any man might know.
But who can know that in the whole of Matter's realm so wide
From its straight path no thing can swerve a little bit aside?

Moreover if all movement is for ever interchained,
The new arising from the old in order ascertained;
If first-beginnings never swerve to make commencement new

Of movement, which may somehow break fate's dreary compact through,—
Else cause from time indefinite on cause would follow still,—
Whence comes throughout the earth this power of freedom of the Will
In living things, this power, I say, extorted from the Fates,
Whereby we men go forward, each where'er his choice dictates,
And further make our movements swerve aside at no precise
Time or determined place, but just as fancy may devise;
Because herein beyond a doubt the will of each to him
Gives the first start, and movement thence is shed through every limb?
Hast thou not seen at races, when the barriers at length
Are in a moment opened, how, for all their eager strength
The steeds can not as suddenly rush forward, as in soul
They would? 'T is that the whole supply of matter in the whole
Body must be together got, that through the joints combined
Its fullest force may follow up the longing of the mind.
So that thou seest the origin of motion from the heart
Is born, and from the mental will at first it takes its start,
And onward thence through all the frame and through its joints is sent.
'T is quite another thing when by the impact violent
Of some one else's greater strength we forward go perforce.

For then 't is clear that in our own despite upon its course
The substance of our body is in hurry borne, until
Its bulk is reined to stillness through the limbs but by the will.
Now dost thou not perceive that, though by forces from without
Many of us are oftentimes compelled to go about,
Against our will driven headlong on, yet in our breast must live
A something which, resisting still, to combat them can strive?
And at this something's sovereign word at times the whole supply
Of matter through our limbs and joints is made to wend awry,
And first put forth, is next reined in, then settles back to rest.
Therefore in merest germs of things, it needs must be confessed,
Some other cause of movement is, beside intrinsic weight
And blows external, whence in us free Will is thus innate.
Because that nothing ever can of naught be made we see:
For weight forbids that movement all by blows should gotten be
As if by outside force: but that the mind itself is free
From inwardly compulsion in each single thing it does,
Nor has to bear its conquered lot in patience, this it owes
To those slight twists aside which we in first-beginnings trace,
Although their time uncertain is, indefinite their place.

Nor was the bulk of Matter more compact than now it is
At any time, nor separate by greater distances;
For naught thereon confers increase, naught perishes therefrom.

Therefore, with whatso motion now our first-beginnings roam,
The selfsame motion through the void in bygone ages bore
Them on, the same will bear them still hereafter evermore.
And bodies which have had the wont of being got, just so
On the same terms will gotten be, to live and thrive and grow
As much in strength as Nature's laws to each of them allow.
Nor yet has any force the power to alter anyhow
The total sum: for no 'beyond' exists, whereto might flee
One kind of Matter from its whole, and whence some novelty
Of strength unknown could rise and burst upon its whole, and all
Its movements render strange, and make Nature unnatural.

One thing herein in thee must no astonishment create;
Why, when our first-beginnings all maintain a constant state
Of motion, yet their sum appears in absolute repose
To stand, save so far as some part its special movements shows:
Because the very nature of these first-beginnings lies
Deep down, far off from reach of sense of ours: so, if thine eyes
See not themselves, their movement must escape thy vision too:
And all the more that other things quite obvious to view
Oft move unseen, if any length of distance intervene.
For many a time the fleecy flocks, that on some hillside green
Crop the glad herbage, creep about wherever, bright with dew
Freshfallen as with gems, the grass the steps of each may woo,

Whilst full-fed lambs about their dams butt merrily in play.
But all appears a blur to us when viewed from far away,
Just like a fleck of white upon the greenness of the hill.
Or take another instance: when thy mighty legions fill
With marching all the plain, and wake the semblances of war,
There all the glitter lifts itself to heaven; the earth afar
On every side is bright with brass; beneath a thunderous sound
From the strong tread of infantry goes up; the hills around
Smitten by shoutings bid the noise up to the stars rebound;
While horsemen hover here and there, or quickly gather rein
To shake, as with their onset fierce they scour across, the plain.
Yet these no less from some high spot on yonder mountains seem
To stand stock still, amid the plains one stationary gleam.

Come now, and learn as next in turn, and inly lay to heart,
Whereof the springs of being things consist, how wide apart
They are in form, how different in varied symmetry
Of shape: not that too few of them with similarity
Of form are gifted, but that all will never coincide
In all respects. No marvel this: when Nature has supplied
Such store of them that neither end nor sum, as I have shown,
Exists, it were not right, I trow, that each of them should own
The selfsame outline, gifted with one shape, and one alone.
Let there go by thee in review man's many tribes, the mute

Scale-clothèd shoals of swimming things, the gladsome herds, the brute
Wild beasts, the birds of many kinds their common haunt that make
Of cheerful spots where waters are, spring, river-bank, and lake,
Or that frequent the trackless woods, and fly beneath the trees.
Then go, of those of any kind take any one thou please;
Thou'lt find in each some difference of form, or shape, or size.
Nor any other way could child its mother recognize,
Or mother know her child: while, as we see to be the case,
They know each other no less well than we of human race.
For oftentimes a calf before the gods' well-ordered fane
Falls down, beside the altars heaped with burning incense slain,
While from its gasping breast it breathes a stream of smoking blood.
Meantime the mother thus bereft throughout the verdant wood
Roams to and fro, and notices the prints set in the ground
By cloven hoofs, and every spot eyes narrowly around,
In hope that she may somewhere spy her missing young, and all
The leafy glades with lowing fills, and back to see her stall
Turns evermore, such longing for her calf has pierced her through.
No juicy willows then avail, no herbage fresh with dew,
Nor yonder streams, that level with their bank-tops smoothly flow,
To make her soul rejoice, or turn away her sudden woe.

Nor can the sight of other calves amid the pastures fair
Draw off the current of her thought, or lighten her of care,
So well she knows her own, so well she seeks it everywhere.
And furthermore the youngling kids whose voices tremble so
Their hornèd mothers know full well, the butting lambkins know
The flocks of bleating sheep; and thus, as Nature's law desires,
Each scampers to its proper teat of milk when thirst requires.
Once more whate'er the kind of grain, thou wilt not every ear
Of any kind behold in full similitude appear,
Without some difference in shape occurring constantly.
In just such wise the families of coloured shells we see
Painting the lap of earth, where'er the waves of ocean beat
The tippling sands that line its curves of shore with gentle feet.
So by like course of reasoning, since first-beginnings are
By Nature made, and not turned out to one particular
Pattern by hand, I say once more, 't is sheer necessity
That some amongst them must in form with others disagree.

By such a line of argument 't is very easy too
To make it plain why levin's fire can easier pass through
All things, than that we light ourselves with earthly logs of pine.
For thou canst say the heavenly flame of lightning, as more fine,
Of smaller bodies is composed, and thus possesses powers
To go through tiny apertures, through which this fire of ours,

Begot of wood and born of pine, may strive to pass in vain.
Moreover light through horn can pierce, yet horn repels the rain.
Why so? unless that light must own component bodies less
In size than those which waters drops of nourishment possess.
And howsoever fast we see wine through a colander
Run down, yet oil on th' other hand is very slow to stir,
Either because its elements of larger size are found,
Or that they are more hooked and more to one another bound,
And therefore it results that all its first-beginnings may
Not each from other able be to break so soon away,
And each through its own aperture to flow without delay.

To this we add that juice of milk and honey on the tongue
Produce a pleasant feeling whilst the mouth they pass along;
But wormwood foul quite otherwise, and horrid centaury,
With nastiness of flavour twist the taster's face awry.
So that thou may'st with ease perceive that bodies smooth and round
Go to make up the things whose touch to sense is pleasant found;
While all things on the contrary which rough or bitter seem,
These by more crooked particles together bound we deem,
And therefore wont to cut their way approach to sense to win,
Breaking the body piecemeal with their cruel coming in.

All things in short that good to feel and ill to handle be,
Since they are wrought in shapes unlike, are bound to disagree.
So think not that the grating harsh of rasping saws consists
Of equally smooth elements, as instrumentalists,
While o'er the strings of some guitar their agile fingers fly,
Evoke, when waking out of sleep sweet Music's melody.
Nor deem that like in character the first-beginnings are
Which to our nostrils force their way, when filthy corpses char,
And when Cilicia's saffron on the stage has just been thrown,
While from some altar close at hand Panchæan scents are blown.
Nor take for granted that from out like seeds can e'er arise
Such goodly tints as have the gift to feed our gladdened eyes,
And such as make their pupils smart, compelling us to tears,
Or any which in aspect foul or horrible appears.
For whatsoever has the power a sense of ours to soothe,
Was in its first-beginnings made not otherwise than smooth;
But whatso on the other hand is harsh and troublesome
Is found to being not without rough matter to have come.
There are things too which neither smooth correctly can be thought,
Nor altogether hooked by barbs enlaced and interwrought;
These rather must have corners which project a little, whence
Theirs is the gift of tickling, more than injuring, a sense.
The lees of wine, the bell-wort named from Helen are of these.

Now last of all that fire which burns and wintry frosts which freeze
Have teeth of nature quite distinct the body's sense to sting,
The very touch of either proves a very simple thing.
For touch, yes touch, hear this ye gods! ye holy powers of heaven!
Touch is the body's sense, or when by outer pressure driven
Some thing inserts itself, or when within the body made
It hurts, or pleases passing forth by Venus' fruitful aid,
Or when by some unlooked-for blow the germs are moved around
Within the frame itself, and sense, themselves confused, confound.
As if mayhap to test the truth of what I say, or why,
Thou gavest thyself a hearty slap on any part to try.
Wherefore the first-beginnings must most widely at their start
Differ, so great a difference of feeling to impart.

Once more what things soever look to us compact and hard
Must by more hookèd particles be each to otherward
Held fast, and closely interlaced like branches in a plant;
Now foremost among things of this kind rocks of adamant,
Wont to despise the hardest blows, first line of battle claim,
With stubborn flintstones, and the strength of iron's sturdy frame,
And brass that struggling with the lock uplifts so shrill a sound.
But those must be created out of bodies smooth and round,

Which having fluid properties in liquid guise appear;
Because their little globules ne'er among themselves cohere,
And always are so capable of quickly slipping down.
Lastly all things which when beheld are in a moment flown,
Like smoke and flame and vapour, must of sheer necessity,—
Though totally of smooth round germs they may not fashioned be,—
Yet not be hindered by a frame all intertwined within;
So that they may the body sting, and make their way through thin
Texture, yet ne'er together cling. Whatever then we see
Thus borne upon the senses thou may'st count with certainty
As not of tangled elements compounded, but acute.
But when thou findest fluid things can bitter be to boot,
Like the salt water of the sea, feel not astonishment.
For, since these fluid are, they must of smooth round forms be blent,
Yet bodies not a few with these of roughness causing pain
Are mingled, though themselves of need no longer hooked remain,
But, rough by nature as they are, must round become from thence,
So that in rolling forward they may irritate the sense.
And for thy being more assured that rough things mix with smooth
In primal forms (whence Neptune's self is harsh enough in sooth),

Sure means of proof exist, wherewith naught else can interfere.
Water grows sweet when often through the earth 't is filtered clear,
And then is drained into a tank and left to settle there,
For its first-bodies' pungency and filth it leaves behind,
Because such roughnesses with earth are easier combined.

And now that I have taught thee this, I next therewith connect
What best may thence thy confidence demand; that with respect
To number first-beginnings must in their variety
Of shape be limited; for, if 't were not so, bodily
On th' other hand some seeds must be unlimitedly great;
Because in any selfsame seed, of any moderate
Smallness you please, there could not be much room for alterings
Of shape. For let us just suppose the primal forms of things
Of three least parts to be composed, or one or two beside;
Well, when in every sort of way by moving thou hast tried,
Shifting the bottom to the top, and changing left to right,
With each in turn of these few parts that in one whole unite,
What look and form that whole assumes from each in each way placed,
It follows, if perchance to try new shapes were still thy taste,
That other parts must added be; and hence it will be plain
For reasons similar that fresh arrangement would again

Require fresh parts, if yet on change of shape thy will were bent.
Therefore of novelty of form the needful consequent
Is growth of bulk; on which account thou couldst not possibly
Believe that seeds possess of shape endless variety.
Lest so thou shouldst necessitate bodies of magnitude
Immense, which I have shown before can never be made good.
Then too our bright barbaric robes, the cloths of brilliant dyes
In Thessaly's shell-purple dipped where Melibœa plies
Her looms, the peacock's centuries of eyes that in the sun
Glitter with laughing loveliness fulfilled, would one by one,
By tints of new creation quelled, be held of no avail;
Men would despise the scent of myrrh, and honey's taste would fail;
The death notes of the swan, the songs so dear to Phœbus' heart
On changeful lutestrings rendered, sunk in silence, would depart:
For greater things than those of old would evermore arise.
And as the good would better grow, no less nor otherwise
All evil things to lower depths of evil would descend,
Till each more foul than that which went before without an end
Would worse assault our nose and ears and eyes and mouth and taste.
But since 't is not so, but for all fixed limits have been placed,
Which bound on either side their power of growth, we must confess
That Matter in its change of shapes is limited no less.

Once more 'twixt summer's wilting warmth and winter's freezing
cold
The road each way has bounded been and measured from of old;
For heat and cold are two extremes, and all degrees of mean
Temperature that fill the scale lie these extremes between.
So things created stand apart in limited degrees,
Because a turning-point is marked at either end by these,
Fire threatening to roast them here, there stiffest frosts to freeze.

And, since I this have taught, I will to add thereto proceed
A thing that fittest thence may win thy credence for its meed,
That first-beginnings which in shape in every point agree
Are numberless: for since of forms dissimilarity
Is limited, things like in all respects must needs transcend
All number's bounds, or else the sum of Matter would have end.
And this already I have proved can never be the case,
Showing in verse how out of quite unbounded time and space
Small particles of Matter still creation's whole maintain
By ceaseless blows on every side in one continued chain.
And if thou seëst certain kinds of animals more rare,
And know'st that nature is in them less apt her fruit to bear;
Still somewhere in some other clime, in regions distant far,
Their numbers may be great enough to fetch them up to par.
As in the class of quadrupeds we see among the first

The serpent-handed elephants, whereof the thousands nursed
In India's wilds secure their haunts with walls of ivory,
So that no man may pass them through; so vast the quantity
Is there of that wild beast, of which few samples here we see.
And now, to give thee up a point, suppose there might exist
Some one sole thing in body born, of any kind thou list,
The like of which in all the whole vast world had never source;
No less, except no limit has been set to Nature's force,
Whence first conceived it could attain to being, it had ne'er
Been made, nor, what is more, could find whereon its growth to rear.
Nay surely, were we to assume that through the boundless whole
Bodies which one sole thing beget in finite numbers roll,
Where, whence, by what compulsion, on what terms, will all of these
In such a sea of Matter meet 'midst foreign substances?
No sort of means, as I opine, of union would there be.
But as, when shipwrecks manifold and great take place at sea,
The mighty waves will helms and prows in all directions fling,
With rowers' benches, yards, and masts, and oars, and everything
That swims, till carven ornaments of poops are floating seen
Round every coast, a warning sign to show to mortal een;
That folk may always choose to shun the strength and treachery

And cunning of the faithless deep, nor trust it when they see
Its placid face at any time smile falsely to allure:
Just so with first-beginnings, if thou once have made it sure
That some of them are limited, the eddies of the tide
Of Matter's sea must scatter them for ever far and wide;
So that they ne'er could be compelled in meeting to unite,
Nor met could hold together, nor could wax in size or might.
And yet that this does commonly occur plain fact will show;
For things can be begotten, and begotten things can grow.
That first-beginnings then, whate'er their kind, can know no ties
Of number now is plain, for thence all Nature draws supplies.
Thus neither may death-laden kinds of motion overcome
Life once for all, and bury it in never ending gloom;
Nor yet can those that birth beget, and after increase give,
Preserve the things which they have made for evermore to live.
And thus the war, before the birth of Time itself engaged,
'Twixt hostile principles is still with even issue waged.
This way and that vitality is swayed; to-day it wins,
To-morrow loses. Mingling with the dirge of death begins
The cry which babies raise when first they see the realms of light:
Nor ever night has followed day, nor dawn succeeded night,

That heard not, blending with the noise of feeble infants' squalls,
The wails that company with death and black-robed funerals.

This more about these things 't is meet that thou with seals shouldst bind
Close on thy memory, and hold committed to thy mind,
That there is naught of all the things whose nature we can see
With eyesight, which of one sole kind of primal forms can be,
Nor any thing which has not drawn its life from mingled seed.
And, just as each possesses in itself more force for deed
And more capacities, the more decidedly it shows
How many kinds and various shapes of germs its self compose
Earth, to begin, possesses in herself first bodies, whence
Springs, that spread coolness constantly, renew the bulk immense
Of ocean: she has bodies too whence fires obtain their birth,
Because her surface is ablaze in many spots of earth,
Though Etna's flames with fury burn more fierce than all the rest.
Bodies she has moreover whence she rears upon her breast
For all mankind her gleaming grain, and fruit-trees glad with fruit;
Whence rivers too, and sylvan shade, and pasture rich to boot,
She can supply to savage beasts among the hills that dwell.
Wherefore, though bodily but one herself, she still is named
The Mighty Mother of the gods, of men, of beasts untamed.

For this is she whom learned bards of Hellas in their hymns
Have sung of old as car-enthroned, and driving tawny limbs
Of lions twain, while this round world, as all their lore professed,
Hung in mid air, since earth on earth could surely never rest.
Wild beasts they harnessed to her car, because, however wild,
A parent's offices of love must soften any child;
They girt a mural crown around her high imperious brow
Because, in choicest places fenced, she guards our cities now.
And, honoured with this badge of rank, in terror-fraught array
The holy Mother's image goes through mighty lands to-day;
And many peoples, in their rites upholding ancient style,
Call her "Idæan Mother," and for suite give many a file
Of Phrygian escort, since they say that Phrygia's land of yore
First nurtured grain, which thence began to spread the whole world o'er.
And eunuchs they assign to her, as if to signify
That whosoever do despite to her divinity,
And show themselves ungrateful to their sires, are in her sight
Unworthy living progeny to bring to realms of light.
There upon hollow kettle-drum and tight-stretched tambourine
Hard hands make music, while rough horns blow menaces between,
And piercèd pipes in Phrygian time set every heart afire.
There weapons borne before them show the fury of their ire;
Well suited with most abject dread of her divinest will

The multitude's unthankful souls and godless breasts to fill.
Therefore when first, in triumph borne through cities vast, she lifts
Her face, and silently its folk with weal unspoken gifts,
With silver coins and brass throughout men strew the way she goes,
Pouring upon her largess rich, and blossoms of the rose
They snow down, shadowing herself and her attendants o'er.
With her there wends a band of men in arms, whom Hellas' lore
Phrygian Curetes calls: perhaps because to measures rude
Beat with their swords they sport, and leap together smeared with blood,
Shaking with nods the frightful plumes that wave on every head,
And bring to mind Mount Dicte's old Curetes; who are said
To have concealed the infant wail of Jupiter in Crete
In days of yore when, boys themselves, around the boy they beat
Their weapons brass on brass to time their swift but measured dance,
Lest Saturn him should seize and grind in cruel jaws perchance,
And make within his mother's breast a wound that ne'er had died.
Wherefore the Mighty Mother aye has armed men by her side:
Or else because they thus portray the goddess's command
That men with arms and strength should love to shield their fatherland,
And o'er their parents ready be in noble guard to stand.
Now, well and neatly as the tale is thus set forth in sooth,

Yet it is very far removed from reason and from truth.
Since from their very nature gods must of necessity
In peace supreme enjoy their life of immortality,
Set far apart from our concerns, with boundless space between.
For free from every sort of pain, from danger free, I ween,
Almighty in their own resource, with naught from us to win,
They are not pleased by our deserts, nor angered by our sin.

And now if any one think fit the sea to dignify
By Neptune's name, by Ceres' corn, or choose to misapply
Bacchus', instead of uttering the proper name for wine,
Let him by all means style our globe terrestrial the divine
Mother of gods: we give him leave; so he in fact refrain
His soul from superstitions base, nor foul it with their stain.
But earth in fact is evermore devoid of sense outright;
And as it first-beginnings holds of variance infinite,
So many things in many ways it issues forth to light.

Thus often in the selfsame field, cropping the selfsame food
In common, wool-clad flocks of sheep, the horses' warlike brood,
And herds of hornèd cattle, 'neath the cover of one sky,
Allaying thirst from one same stream of water flowing by,
Live different in feature, and the nature still maintain
Each of its sires, and follow still the habits of its strain:

So great dissimilarity of matter can abound
In every sort of grass, so great in every stream be found.
Hence further any living thing thou please of any kind
Of bones and blood, moisture and heat, veins, sinews, flesh, combined
Consists, and these, all differing among themselves so far,
From first-beginnings not alike in shape compounded are.
Moreover things which, set on fire, burn up and blaze amain
Some particles, if naught besides, must in their mass contain,
From which they get the power to spread red flames, and light to lift,
To scatter sparks, and ashes far and wide to send adrift.
Thus if through all things else that be thou travel with the same
System of thought, thou'lt find that all conceal within their frame
The seeds of many things, and shapes diverse to bonds compel.
Once more thou look'st on many things whereon besides their smell
Colour and taste have been conferred; and first among all these
Most of the gifts on altars burnt immortal gods to please.
And therefore these of differing first elements consist:
For smell of roasting thrusts itself on sense where tints are missed;
Entrance to our perceptions too tints by one way procure,
Taste by another, so their first forms' difference is sure.
Therefore we see that primal forms unlike in source and breed

Meet in one mass; and thus that things subsist by mingled seed.
Nay in this very verse of ours thou see'st that everywhere
A host of common elements in many words appear,
Although thou canst not but confess that every word and line
Differs, and that in each of them strange elements combine:
Not that one common letter comes too seldom into view,
Nor that all letters just the same compose not any two
Verses or words; but that not oft in full identity
One matches other. So in all the rest of what we see,
To many things though many first-beginnings common are,
Yet meeting they can wholes produce in no way similar.
Wherefore it may deservedly be said that gladsome grain,
And trees, and men, far different first elements contain.

And yet thou must not think all things can be in every way
Together joined, for monsters then in open light of day
Would be produced: here shapes half man half brute would scare thine eyes;
There lofty boughs of trees would sprout from living human thighs;
And limbs of land-bred beasts would knit with those of ocean's breed;
And Nature in her wild domains, whence all come forth, would feed

Chimeras, from their hideous mouths to breathe devouring flame.
But of all this 't is manifest that nothing ever came
To pass: because we see that all of certain seed and womb
Begot retain the traces of their stock when growth has come.
Know then that all this needs must be on settled system wrought:
Because for each the bodies fit from all he eats are brought
Apart inside his limbs to meet, and there to generate
Movement to suit, whilst all that own incongruous estate
Are cast by Nature on the ground; and many things, we know,
In form unseen escape us, as if hastened by a blow,
For these have nowhere taken hold, nor able been to be
Willing participators in our life's activity.
And lest perhaps thou deem this law can breathing things control
Alone, I tell thee this same rule governs creation's whole:
For just as all created things in nature through and through
Reciprocally differ, it is necessary too
That each from primal forms unlike in shape should fashioned be.
Not that but few of them possess great similarity
Of form, but that in all respects they seldom coincide.
And when the seeds are different, a difference as wide
Must sever intervals, and routes, and bonds, and weights, and blows,
And motions, and collisions; which affect not only those

Who own a breathing body, but the dry earth from the sea
Keep separate, and heaven from earth dispart eternally.

Come now and words of lore by me with love's sweet labour sought
Learn inly, lest thou deem all things from white beginnings wrought
Which have a white appearance, and shine fair before thine eyes;
Or that black things are from black seed created in like wise;
Or, in regard to any thing that any colour bears,
Thou set it down for certain that that sort of tint it wears,
Because its matter's elements were with that colour dyed.
Now colours in the bodies of mere matter ne'er abide
At all, nor like nor yet unlike the object which they make.
And if perchance it seem to thee clear that thy mind can take
No cognizance of forms like these, thou goest far astray.
For when the blind, who ne'er have seen the sunny light of day,
Are able objects ne'ertheless by touch to recognize,
Though ne'er to them from time's first birth associate with dyes;
We may be sure that our minds too are free to entertain
Knowledge of things as not imbued with any colour's stain.
Besides when we take hold of things, while we ourselves are blind
Through night's obscurity, no sense of colour strikes our mind.
Now, having proved this possible, its truth I next will teach.

For every colour can be changed to others each to each:
And this with first-beginnings could on no condition be,
Because at least some part of these from changes must be free,
Lest all things should be utterly reduced to nothingness.
For whatso in its changes must its own set bounds transgress
Incontinently is the death of that which was before.
So be thou careful ere the seeds of things thou colour o'er,
Lest all be turned to naught again, and live for thee no more.

Besides if to first elements their nature has assigned
No colours, while it lets them be in many forms combined,
Whereout they generate all sorts and all varieties
Of colour, (since to every seed it greatly signifies
Wherewith, and in what place, it is in combination held,
And how it is amongst the rest attracted or repelled,)
It grows quite easy all at once to tell the reason why
Those things, which but a little while ago were black of dye,
Can in a moment don the hue of purest marble-white;
Just like the sea which, when the winds uprouse it in their might,
Turns all its blue to billows gray with marbled edges bright.
For thou could'st say that what appears so often black to view,
Whene'er its matter is disturbed, and order made anew
Of its first elements, and some are added, some withdrawn,
Becomes at once in seeming white and shining as the dawn.

But if the waters of the deep were formed of seeds outright
By nature blue, there were no means whereby it could grow white.
For turn blue germs howe'er you please, arrange them as you will,
Yet marble's tint they never take, but blue continue still.
While if the seeds that constitute the brightness of the sea,
Pure as it is, of various tints, one here one there, could be,—
As often out of many forms with angles all askew
An object may be made to square and in one figure too,—
It were but fair that, as the square is seen in it to keep
Forms quite unlike itself, so in the waters of the deep,
Or any other thing of one unmingled brightness, we
A multitude of colours all quite different should see.
Besides the many kinds of forms no sort of hindrance are,
Nor obstacle, to keep their whole outside from being square;
Whereas a multitude of tints in seeds would make it quite
Impossible that aught should be in perfect oneness white.
And then the cause which often leads and prompts us to assign
Colours to first-beginnings must at once, as I opine,
Fall to the ground, if from white seeds white objects are not made,
Nor black ones out of black, but out of any other shade.
For to be sure things white with more of spontaneity
Would grow from nothingness, that out of blackness gotten be,

Or other colour, wherewithal white stands at enmity.
Again since colours cannot show except when light is clear,
And first-beginnings never in the light of day appear,
'T is plain enough that these are ne'er with any colour dight.
Indeed what colour could there be in darkness blind as night?
Nay tints are changed by light itself according as the rays
Of sunshine on them from above direct or sidelong blaze.
This is the cause why in the sun a pigeon's feathers gleam,
Which crown its neck, and round its throat a ring of glory seem:
For at one time their sheen appears like garnets crimson-red,
Anon it comes to pass that with some turning of the head
They blend the green of emeralds with deepest azure-blue.
And thus the peacock's tail, when bathed in floods of sunshine too,
For the same reason changes all its tints when turned about;
And since these tints are by some strokes of light begot, no doubt
We ought to feel assured that they cannot occur without.
And since the apple of the eye receives a sort of blow
When it is said to have a sense of something white, and so
Another when it is aware of black or other dye;
And since in objects which we touch it does not signify
What colour they are gifted with, but very much indeed
What shape they have, 't is clear that first-beginnings have no need
Of colour, but with change of form their feel will change as well.

Once more if certain colours do not naturally dwell
In certain shapes, but all shapes made of first-beginnings can
Consist with any hue, why not just follow up the plan
And have all things composed of these, whate'er their kind may be,
With every kind of tint bedecked alike and equally?
And then it would be fair that crows in flight should often fling
White lights athwart the welkin from white feathers in their wing,
And swans of ebon seed begot would float of ebon hue,
Or born with any other tint would shock our startled view.
And furthermore the more a thing to shreds exceeding small
Is dragged apart, the more it is a patent fact to all
That colours vanish step by step, then wholly disappear.
As happens if a damask cloth to little bits we tear;
Its purple and its crimson too, far brighter than the rest,
If sundered thread by thread, of tint are surely dispossessed.
So that thou mayest hence conclude that shreds of shreds their last
Have breathed of colour, e'er themselves to primal forms have passed.
Lastly because we all allow that certain bodies sound
And scent do not emit, from this it comes that we are bound
Not to attribute voice and smell to all that round us lie.
So, as we cannot look upon all objects with the eye,
We may feel sure that things exist as throughly destitute
Of colour, as the others are of voice and smell to boot;

And that a mind with keen good sense endowed is not more slack
These to conceive, than aught beside which other gifts may lack.

But lest thou haply think that first-beginnings cannot hold
Colour alone, know too that they alike to heat and cold
Are strangers, of warm vapour too they lack capacity,
And are devoid of sound, and dry of juice internally;
Nor does a perfume of their own around their bodies stir.
Just as when soothing waters of sweet marjoram and myrrh
And bloom of spikenard, whence the smell of nectar breathes about
Thy nostrils, thou begin'st to mix, if thou canst search it out
Thou first a base of scentless oil of olive must prepare
Whereof no savour wafted to thy nose affects the air,
That so as little as may be the mingled odours, thrown
To simmer in it, it may mar by flavour of its own.
So by like course of reasoning are first-beginnings bound
Not to provide for things which they must father scent or sound
Which is their own, for out of them no thing may go astray.
Nor for this reason are they free or taste to give away,
Or cold, or heat, or vapour's warmth, or any thing beside.
For since all these, whate'er they be, must liable abide
To death,—the fragile rot, the soft wear out, the hollow fade
Away,—between them all and first-beginnings must be made
A line of demarcation, if our aim is to supply

Immortal cornerstones whereon all nature may rely
For strength, lest all things should return to nothing utterly.

And now that objects, which we see sensation to possess,
From first-beginnings quite devoid of feeling ne'ertheless
Are made, we must allow; and all that comes before our eyes
In evidence this judgment nor opposes nor denies;
But rather leads us by the hand, enforcing, as I said,
Belief that out of senseless things the living can be bred.
For any one in fact can see that living worms have birth
From nasty dung, whenever rains have drenched the soaking earth
Untimely, and affected it with taint of rottenness.
Besides all sorts of senseless things to living change no less.
For rivers, leaves, and pastures glad, themselves to cattle turn;
And flesh of cattle to our own transmuted we discern;
And our flesh too not seldom serves to strengthen ravening
Wild beasts, or fatten birds that beat the air with mighty wing.
Therefore all sorts of food are changed by Nature into things
That live, and thence she every sense of breathing creatures brings,
In much the same way as she bids dry logs of wood expire
In flame, and all things quick or dead transmutes to burning fire.
So now at least thou seest how vast a difference it yet
Makes to our first-beginnings in what order each is set,
And wherewithal they mix, and what impulses give and get.

What then is that which strikes the mind, and urges it to give
Quick speech to feelings' varied throng, and vow 't will ne'er believe
That things which feel from what does not can ever be begot?
Why nothing, but that stones, and wood, and mould, and all that lot
Of bodies, howsoever blent, no living thing can make.
Now of one point herein 't is meet that memory should take
Notice, that I do not aver that all the elements,
Whence things are made, can all alike at once engender sense;
But that for forming things that feel it greatly signifies
What shape each first-beginning owns, how small it is in size,
And further what its lot may be in movement, order, place.
Yet though of these conditions we in logs and clods can trace
No one, still these, when rotten grown, as 't were, from constant rain
Give birth to worms, because the forms of matter they contain
Have from their ancient order been by something new upset,
And so been brought together as live creatures to beget.
Now those who say that all that feels from other elements
That feel is made, in that they gift these with the wont of sense
Render them soft, because all sense whatever is combined
With flesh and veins and sinews, which we see in every kind
Of soft consistency, nay worse, of mortal substance wrought.
But let that pass: let these awhile exempt from death be thought;

Yet surely they must either in some part's sensation share,
Or feel with all the living thing whereof they portions are.
But that a part should feel apart can in no manner be,
For each sensation of each limb affects in some degree
All others, nor can hand of ours, nor any other part,
Alone be conscious of a sense of pleasure or of smart.
Like the whole being's feeling then their feeling needs must be,
So that with life's sensation they in all points may agree.

But how can these of things be styled the first-beginnings, how
Escape the paths of death, that rank with living creatures now,
When things that live are one and all the same as things that die?
But e'en if this were possible, they naught would further by
Their gathering and meeting, save a thronging, breathing, crowd;
As men, we know, and wildwood brutes, and cattle are allowed
No single creature to produce by blending of their powers.
Thus first-beginnings would possess sensations just like ours.

But if mayhap they cast away sensation of their own,
And take another in its stead, what need has there been shown
Of giving what is thus withdrawn? Besides, as we before
Alleged, since eggs of birds, we see, are altered by the score
To living chicks, and worms break forth whene'er putridity,
Arising from untimely rains, of earth has mastery,
We know sensation can arise from things that senseless be.

And now if any chance to say that sense can be begot

By process of mutation out of things that have it not,
Or else that by a kind of birth, as 't were, it comes to light;
For such an one 't will be enough to make it plain, and quite
Beyond a doubt, that birth without some meeting had before
Ne'er happens, nor does aught unblent exchange its shape of yore.
And first of all there cannot be in any body sense
Before it is begotten, ere its living powers commence;
Because its elements in fact lie scattered here and there
In rivers, and in earth and things of earth create, and air,
And have not yet in fitting mode forgathered to produce
Movements among themselves, whereby a sense for every use
In every living creature may be kindled into life.

Again if on a living thing there light in any strife
A heavier blow than nature brooks, it fells it straight, and all
Feelings of mind and body too confuses in the fall;
For all the first-beginnings from their places are set free,
And all the movements fraught with life arrested totally,
Till matter, trembling with the shock through all the limbs that flies,
Unlooses from the body's bonds the vital energies
Of soul, and casts them forth abroad through every hollow pore.
For to a blow inflicted what can we attribute more
Than that it scatters things about and matter disunites?

It happens too at times that, if the blow less sharply smites,
The vital movements which are left have strength to win the day,
To win, and all the injury's wild tumult to allay,
And call the functions all to their accustomed courses back,
Repelling in his very hour of triumph the attack
Of Death, and lighting up the spark of senses almost gone.
For pray, how else could living thing be able, standing on
Death's threshold, with regathered powers of mind anew to start
In life, and not complete the course nigh finished, and depart?
Moreover, since we all feel pain, when by some outer force
Particles of our substance have been driven out of course
Through living flesh and limbs, till in their inmost seats they quake,
And these, set right again, a sense of calm enjoyment make;
We may be well assured that first-beginnings by no pain
Are tried at all, nor from themselves can any pleasure gain;
Because no forms of other first-beginnings are contained
In them, by whose displacement all at once they might be pained,
Nor may they any fruit of sweet sensation gather thence:
Wherefore they cannot be endowed with any sort of sense.
Again if, so that sense may dwell in all the things that live,
We needs must to their primal forms the power of feeling give,
What of the special seeds whereout the race of men is made?

Now, I presume, they shake their sides in laughing glee arrayed,
Anon with rain of bitter tears both cheek and chin bedew;
And much no doubt they talk about creation's blending too,
And further question what their own first elements must be:
Since, inasmuch as they are like our own humanity,
They too must out of other first-beginnings get their frame:
And so on, till the stopping point we could not dare to name.
To press the point, whate'er thou say'st can speak and laugh and know,
Must still of other things be formed which do exactly so.
But if we see that this is mere mad talk and fit for fools,
That though not made of laughing seed men laugh, and in the schools
Get wisdom, and in learned words expound in case of need
Their reasons, though they are not sprung from wise or learned seed;
Why less should objects, which possess sensation as we see,
Be formed from seeds which lack themselves all sensibility?
And furthermore from heavenly seeds we all derive our birth:
For one is father of us all, from whom, when mother earth
Has taken in his fluid drops of moisture, she conceives
And brings to light her gleaming grain, her forests' merry leaves,
Yea and mankind; all races too of savage beasts she breeds,
In that she furnishes the food whereon their body feeds,

And by whose means a pleasant life they lead from sire to son.
Wherefore the name of 'Mother' she most worthily has won.

That also back to earth, which came from earth in time of yore,
Returns again, and what was sent from ether's viewless shore
The heavenly regions take once more into its olden place.
Nor does Death so abolish things as wholly to efface
The bodies of their matter, but divides their gatherings,
And then with each joins other forms: and hence it comes that things
So alter all their shapes, and change their colours o'er and o'er,
And new sensations now receive, and in a minute more
Discard: so that thou mayest know how greatly it imports
To first-beginnings in what place, and with what other sorts,
They may be held together, and what blows they get and give;
And not suppose that, while these first undying bodies live,
That must for aye abide with them which we see floating on
Their outer surface, scarcely born just now and dead anon.
Nay, even in this verse of ours the consequence is vast
In what arrangement and what rank its elements are cast;
For the same letters sea and land, and heaven and earth, as well
As streams and sunshine, crops and trees, and living creatures, spell:
And though they be not all alike, yet most at all events

Not widely differ, but with these position governs sense.
So also in the real things of matter we may know
If ever interval, or path, or rank, or weight, or blow,
Or union, or concussion, or position, motion, shape,
Be changed, the things themselves from change by no means can escape.

I pray thee lend me now thy mind to truthful argument;
For now a subject wholly new is vehemently bent
To reach thine ears, a novel scene to spread before thine eyes.
Yet naught so easy ever was, as not to cause surprize
At first, and seem incapable of meriting belief;
And likewise naught so marvellous or vast has seemed, but brief
Acquaintance by degrees has thrown all sense of wonder by.
Just look upon the brilliance and the clearness of the sky,
And what it holds, the clustered stars that as at random stray,
The moon, the sun's full flood of light in splendour of mid-day;
And tell me, if all these at once had shone on mortal een
To-day, quite suddenly without a note of warning seen,
Could aught than such a world be called more wonderful, more great,
Or more unlike what common folk had dared anticipate?
Nothing, I think; the sight had been so passing marvellous.
And yet we know that, sated with the seeing, none of us

Will take the pains to yon clear realms of heaven to lift his gaze.
Wherefore refrain thyself, nor let its newness so amaze
Thy mind, that thou should'st from the first my argument eschew;
But weigh it in nice balances of reason; and, if true
It seem, surrender, if untrue, then gird thee for the lists.
For since the total sum of space without a bound exists
Beyond the walls of this our earth, the mind will question why
And what those further regions are, which fain it would descry,
And whither it in thought's forecast is free itself to fly.

At the beginning to begin, there spreads on every side
Around ourselves, above, below, and everywhere, a wide
Expanse of space, whereof there is no end, as I have shown,
And void's own nature proves, and fact proclaims in plainest tone.
Wherefore no probability may anyhow be found,—
While infinite extent of space is spreading all around,
And seeds of countless number and unfathomed sum in it,
Bestirred by ceaseless motion in all sorts of manners flit,—
That this one earthly globe, this heaven of ours, alone is wrought,
And that such hosts of matter's forms beyond it fashion naught.
The less so since this world was made by nature, as through force
Inborn the seeds of things have happed to clash upon their course,
In many ways together brought at random and in vain,
Till some chance combination all at once they happed to gain,
And met to form the rudiments of mighty substances,

Earth, sea, and sky, and every kind of breathing thing that is
Wherefore we cannot but confess that otherwhere may be
Of matter other gatherings, and more than two or three,
Like this of ours which ether holds locked in its close embrace.

Again, when so much matter is prepared, and so much place
Ready to hand, and neither fact nor reason to impede
Is found, things must to perfecting beyond all doubt proceed.
Now if the stock of seeds, as we have argued, is so great
As all the life of living men could not enumerate,
And force and nature in them still abide the very same
To carry seeds each to its place, as that whereby these came
Borne hither this our world to make, we surely must allow
That there are other worlds like ours in other places now,
And other breeds of animals, and other kinds of men.

Add here, that in the universe no thing has yet to ken
Been brought, born quite unique to grow in lonely solitude,
And not been one amongst a race, with many of a brood
Just like it. Thus, my noble friend, my Memmius, thou wilt find
Amidst the first of living things each mountain-roving kind
Of brutes, thus we ourselves, are made, thus all the fish that ply
Their fins in silence, thus all breeds of feathered fowl that fly.
And so for reasons just the same it may not be denied
That sky and earth, and sun and moon, and sea, and all beside,
Are not unique, but rather are in number numberless.

Because for each of these there is an end of life no less
Securely fixed, and all no less begotten bodies wear,
Than all the sorts of things which here in multitudes appear.

This learning if thou get and keep, Nature is seen by thee
Untrammelled, instantly released from lordly tyranny,
Of her own self, with no divine support, her work to do.
For by the holy bosoms of the gods immortal, who
In undisturbed serenity a quiet lifetime pass,
Which of them all has strength to rule creation's boundless mass?
Or hold the deep's strong bridle tight in overruling hands?
Or all the heavens in harmony to turn? or all the lands
To warm to fruitfulness by fire diffused throughout the air?
Or to be evermore at hand always and everywhere,
Making thick darkness with his clouds, and all th' untroubled sky
Shaking with thunders, whilst his bolts of levin he lets fly
To cast his own fair temples down, or to the wilderness
Withdrawing practises in ire his darts, whose fierce assault
Oft passes sinners by to slay folk guilty of no fault?

And since the birth-time of our globe, the first primeval day
When over sea and land shone out the new sun's rising ray,
A multitude of bodies have been added from without,
Of seeds contributed by blows from all the world about,
Whence land and sea might able be to wax in size, and whence

The lofty vault of heaven itself might gain circumference,
And lift its walls high off the earth, and atmosphere might grow.
For everybody to its own true place by every blow
Is dealt around, and each repairs to those of kindred birth.
Moisture to moisture joins itself; by earthy bodies earth
Increases, fire by fire is fed, and air produces air,
Till Nature with completing hand, herself who made whate'er
Exists, has all her creatures led as far as growth can go:
As happens when no more than just enough for ebb and flow
Of vital action is received within the living veins.
Here at a standstill life's advance in everything remains:
Here Nature by inherent strength all increment restrains.
For all the things that in thy sight with gladsome growth increase,
And climb the steps to ripened years that lead by slow degrees,
Gather more bodies to themselves than those which they expel,
Whilst easy passage to the veins for food is possible;
Before their bulk has so spread out, as much to throw aside,
And more to spend in daily waste than feeding has supplied.
Because in things we must concede the flux and ebbing too
Of many bodies certainly, but more the while accrue
Until the very tip-top point of increment they reach.
Thenceforward bit by bit the powers, and ripened strength of each,
Crumble with age, and slip from bad to worse in slow decay.

For when the power of growth from aught has once been ta'en
away,
Just in proportion as a thing is greater or more wide,
More are the bodies which it sheds and wastes on every side.
Then too the food through all the veins is spread less easily,
And, in proportion to the heat expended, scarce can be
Enough to fill the vacuum, and stop deficiency.
And so by right they perish quite, since all by ebb and flow
Grow thinner, and succumb some day to some external blow.
For food at last fails wholly in extremity of age,
And bodies beating from without unceasingly engage
In efforts by unfriendly blows to conquer and to kill.
Since food then works in vain the place of matter lost to fill
By making matter new, in vain to prop the weak, and all
Existing things to keep alive, when veins become too small
To take enough, and Nature less than is required supplies.
Just so too will the walls around this world of ours that rise
Some day be stormed, and crumble down in ruinous decay.
Nay and this age enfeebled now, and earth worn out to-day,
Can scarce bring forth small animals, though every race of yore
She bred, and savage beasts with bulk immense of body bore.
For not by any golden cord, as I opine, from heaven
Above let down, have mortal kinds to earth's broad fields been
given,

Nor were they ocean-born of waves that moan along the beach;
But earth produced them, she whose breast still finds its food for each.
Yea further of her own free will for creatures doomed to die
She at the first 'gan lavishly glad vineyards to supply,
And gleaming grain, and luscious fruits, and cheerful pasture-lands:
Which now scarce grow at all though helped by labour of men's hands.'
We break our oxen down, we waste the strength of husbandmen,
We wear our iron out; our fields scarce feed us even then;
So chary are they of their yield, so greedy of our toil.
And now the ancient ploughman shakes his head to see the soil,
Sighing to think his handiwork has gone so oft to waste;
And, whilst he groans o'er present times, comparing them with past,
Highly extols his sires' good luck, and grumbles peevishly
That that old generation gone was full of piety,
And so in narrow bounds endured with ease life's little span;
For holdings were much smaller then than now, take man for man.
So the sad dresser of the vine now old and half decayed
Rails at the season's influence, and pesters heaven for aid;
And holds no whit that all things waste by slow degrees, and wend
Towards the grave, worn out with length of days that have an end.

BOOK III.

OF MIND AND SOUL.



BOOK III.

O THOU who out of murk so thick wert first to lift so bright
A torch, upon the wants of life to shed its guiding light,
Thou glory of the sons of Greece, I follow thee, and place
My footsteps firmly only where thine own have left their trace;
With no desire of rivalling, but out of love to thee,
Longing to do as thou hast done. Who talks of rivalry
'Twixt swan and swallow? Have a kid's unsteady limbs the force
To vie in running with the strength and mettle of a horse?
Thou, sire, art the discoverer of things, thou fatherly
Directions handest down to us; and in thy writings we,
As bees sip honey here and there amid the flowery meads,
Find golden words on every page, whereon our spirit feeds,
Golden indeed and worthiest to live for evermore.

For soon as once thy system, from a mind of heavenly lore
O'erwelling, trumpet-tongued begins Things' Nature to explain,
My mental fears take wing, the world's old walls are rent in twain,
And vanish, all throughout the void the course of things I see.
I see the calm power of the gods, the sweet serenity

Of their abodes, which never feel the shock of angry winds
Nor wet of cloud-begotten rains, where bitter frost ne'er binds
The white snow as it falls to hurt, but ether always clear
O'erarches them, while lapped in light they laugh and make good cheer,
And Nature freely gives her all, and nothing interferes
To mar their perfect peace of mind through all the circling years.
On the other hand the darksome realms of Acheron are seen
Nowhere, but not that earth precludes by coming in between
Of what goes on in void beneath our feet sufficient sight.
Wherefore at finding this a sense of infinite delight
And awe possesses me, to think how Nature by thine aid
So plain and manifest throughout and open has been made.

And inasmuch as I have taught men what the natures are
Of matter's first-beginnings, how, in shapes dissimilar,
Driven in eternal movement each spontaneously flies
Through space, and in what way from these all kinds of things arise;
Next after this the nature of the mind and soul from me
Appears to ask for clearing up by means of poesy;
To cast out headlong from our midst that dread of Acheron,
Which to its depths the life of man has worried and undone;
Till with the sable hues of death each thing we once enjoyed

Is coloured, and no pleasure can be pure and unalloyed.
For as for what men oft allege, that naught so terrible
As life dishonoured or diseased is found in death and hell;
And that they know the nature of the soul to be of blood,
Or e'en of wind (if haply that assertion suit their mood);
And that they have no sort of need of this our reasoning;
The least attention shows that for the sake of praise they fling
These sayings forth, and not at all because they think them true.
For just these folk, if exiled from their country, banished too
From sight of men, disgraced besides by crimes of foullest name,
By every kind of misery assailed, live all the same.
Through abject want they offer to the dead where'er they go,
They slay black sheep, they sacrifice to gods who dwell below
Among the shades, nay, as their own distresses grow more sore,
They turn their thoughts to matters of religion all the more.
So, friend, 't is well to watch a man when deep adversities,
And doubts, and dangers, hem him round, to find out what he is.
For then at last the voice of truth wells from the inmost breast,
And honest fact remains, when mere part-acting is suppressed.
Again the lust of wealth, the blind desire of rank and show,
Which force unhappy men beyond the bounds of law to go,
And sometimes, as copartners or accomplices in crime,
Through day and night to strive with toil, for other end sublime,

To win the highest place,—these wounds unhealed in men who live,—
Not their least share of nutriment from dread of death derive.
For shame and scorn and bitter want are counted commonly
To keep with sweet and settled life no kind of company,
Being as 't were mere waiters at the portals of the tomb.
So haps it that, by false alarms of penury o'ercome,
In eager haste to hie them far away from such a doom,
Men fan the sparks of civil strife, and double in their greed
Their properties by heaping up foul murders, deed on deed;
And feel a cruel pleasure when a brother's death they hear,
And shun the tables of their kin from mingled hate and fear.

And from no other cause than this, alarmed no otherwise,
Men often dwine with envy, when they see before their eyes
Another man looked up to, great, his name on honour's scroll
Of gold engraven, whilst themselves in dirt and darkness roll.
Some wear themselves away to win a statue and a name.
Nay sometimes men are so afraid of dying, that this same
Sheer dread begets a hate of life, of looking on the light;
Till sad at heart they doom themselves to die in death's despite,
Unmindful that this very dread bids all their troubles rise,
This tortures modest poverty, this sunders friendship's ties,
This counsels us the heart's most pure affections to despise.
And oft ere now have men betrayed their country and their kin

Beloved erewhile, in hopes escape from Acheron to win.
For just as children tremble in the dark, and feel affright
Of all the things they think they see, so we in broad daylight
Are scared at times by matters, which should cause us no more fear
That what our children shudder at, when fancy brings them near.
Therefore this darkness of the mind, this fanciful alarm,
Not the sun's beams, nor noon-day's shafts of clearest light can charm
Away, but reason's look and laws must utterly disarm.

First then the mind, which oft is clept the intellect, I say,
The governing, advising power that exercises sway
Over man's life, is just as much a part of man as feet,
Or hands, or eyes, or aught that makes the living whole complete.
And yet no little number of philosophers have taught
That mental sense must not in one fixed spot to dwell be thought,
But is a mere condition of the body, synchronous
With life, which Greeks are wont to term 'Harmonia,' making us
Live with mind's feeling, although mind in no one portion be.
For as men talk of bodily sound health familiarly,
And yet this health is in no sense a portion of the sound;
So, say they, mental sense may not to any part be bound.
Wherein they err in many ways and much, as I opine.
For oft our frame, which we behold, will evidently dwine,

When in some other hidden part we all the while are gay:
And frequently the like occurs but just the other way,
When persons sick in mind enjoy full bodily delight:
Exactly as a man sometimes will feel his head all right
And wholly free from pain, although his foot is very sore.
Besides whene'er to gentle sleep our limbs are rendered o'er,
And, full of food but feeling naught, the body lies stretched out,
There is a something else in us which still is tossed about
Just at that time in many ways, and feels on its own part
Joy's every movement, aye and knows imagined cares of heart.

And next that thou may'st rest assured that soul can also be
Throned in the limbs, and that 't is not through any 'Harmony'
That bodies feel, the proof is here: though great part of the frame
Be ta'en away, life in the limbs oft tarries all the same.
Yet on the other hand this life, if only there be spent
A few small particles of heat, and through the mouth be sent
A little air, straight quits the veins and flies from every bone.
So that hereby this truth appears indisputably shown,
All bodies have not equal gifts, nor equally sustain
Healthy conditions; rather those, that in themselves contain
The germs of breath and warmth, cause life within us to remain.

Warmth therefore and the breath of life are in the body bred
As parts of it, and only leave our limbs when we are dead.
Wherefore since mind and soul are found in Nature's scheme to be,

As it were, parts of man, give up the name of 'Harmony,'—
Whether to music-masters brought from towering Helicon,
Or dragged by them from somewhere else, and deftly tacked upon
A thing which of distinctive name then stood in utmost need,—
Leave it to them, whate'er it be; and what I tell thee heed.

Now I assert that mind and soul are held in very close
Connection, and one nature by combining two compose;
But that the chief, to whose decrees the body gives effect,
Is the advising power, which we call mind or intellect.
And this in the mid region of the bosom holds its seat,
For there alarm and terror leap, round it the soothing beat
Of pleasure pulses; there then mind and intellect abide.
The other part, the soul, spread out through all there is beside
Of body, moves obedient to the nod and bent of mind.
Now mind possesses consciousness, and private joys can find
Alone, when nothing either soul or body occupies.
For just as when th' assault of pain has seized the head or eyes
The part assailed is hurt, but all the body is not racked
With anguish, even so the mind not seldom is attacked
By hurtful things, or finds delight in pleasure, while the rest,
The soul, dispersed through limbs and joints, is wholly unimpressed.
But when the mind is stirred by fear of more intensity,

Then all the soul in all the limbs feels with it, as we see :
Pallor and perspiration o'er the frame at once get sway,
The tongue breaks down and all its power of language dies away,
The joints collapse, the eyes grow dim, there 's singing in the ears ;
Nay men are often seen to reel and fall from mental fears.
From these things then whoever will right easily may know
That soul with mind is closely joined, and when it feels the blow
Of mind, forthwith it smites the frame, and bids it forward go.
This very reason shows us too that mind and soul are both
Bodily things : for when we see them rouse the limbs from sloth,
Starting the body out of sleep, changing the countenance,
Leading and turning all the man where'er themselves may chance
To choose, and know that save by touch such things could not occur,
And touch cannot be bodiless, say, must we not infer
At once that mind and soul possess corporeal character?
Beside thou seest how mind at times an equal part will bear
Of grief with flesh, by sympathy the body's hurts will share.
For when some dreadful weapon's force its deadly aim to win
Has failed, but bones and sinews lie dissevered deep within,
Still faintness follows fast, a dull desire to lay us down
On earth, and there a heat of mind to fever quickly grown,
With longings now and then to rise, scarce positively shown.

Therefore of nature bodily the mind must needs be found,
Since thus it suffers from a thrust that deals a fleshly wound.

Now with what sort of body this our mind has been endued,
And whence it came to being, I will labour to make good.
In the first place I say it is subtile exceedingly,
And fashioned from the very least of particles. To see
That this is so, no more than just one mental glance will need;
For nothing visible occurs at such a rate of speed,
As when the mind conceives a thought and carries it to deed.
Therefore mind faster moves itself than any of the things
Which Nature's vast variety before our vision brings:
And so it must be formed, because so very moveable,
Of seeds most throughly round, and just as small as possible,
In order that it may be stirred by the least motive force.
For water 'neath so little stress is moved, and changes course,
Because 't is made of tiny shapes that easily are rolled:
Whilst honey on the other hand is much more firm of hold,
Its juices far more sluggardly, its action far more slow,
Since all the crowd of atoms, which to form its matter go,
Coheres more closely, being shaped of bodies not so smooth
As those of water, nor so fine and round, to tell the truth.
Just so a breeze will blow, how light and soft soe'er its play,
From top to base the highest heap of poppy-seeds away;

But Eurus' self may naught avail a pile of stones to move.
Wherefore the smaller bodies are, (as these examples prove,)
And lighter, they will all the more in nimbleness abound.
Contrariwise whatever thing of massive weight is found
And rugged shape, the same will be proportionately staid.
Now then, since mind is shown to be of mobile nature made
Beyond all other things, it must likewise surpass them all
In being formed of particles more smooth and round and small;
The knowledge of which fact, if once thy fears thou overmount,
In many matters, good my friend, will turn to thine account.
Another circumstance affords plain evidence how thin
The texture of the mind must be, and how 't is holden in
Most narrow compass; if indeed to one it gather can.
As soon as e'er the careless calm of death has got of man
Possession, when both mind and soul have ta'en them clean away,
Thou wilt see nothing minished from the lifeless lump of clay.
Its form, its weight, are just the same; it shows itself by death
Unchanged, save in life's feeling and a little warmish breath.
So the whole soul must needs consist of tiny seeds combined
By veins and flesh and sinews through the body intertwined.
Because when it has taken flight but newly from the frame,
Th' external outline of the limbs presents the very same
Semblance, and not the merest jot is wanting of the weight.
Exactly as good wine's bouquet will soon evaporate,

Or the sweet breath of perfumes will disperse amid the air,
Or succulence will pass away from any thing whate'er,
And yet the thing itself will thence no smaller to the sight
Appear, nor grow in any, e'en the least, degree more light.
For in a body's fashioning no particles are blent,
Except the infinitely small, for making juice and scent.
Therefore once more I say it o'er, 't is plain enough to see
That of the smallest seeds both mind and soul create must be,
Since their withdrawal alters not things' weight perceptibly.

Yet must we not their nature deem of oneness wholly plain;
Because a certain subtile breath quits men in mortal pain,
And warmth therewith, and furthermore warmth carries with it air:
For warmth can nowhere dwell, unless air too be present there.
Since in the case of warmth, because its nature is so thin,
Many first particles of air must needs be moved therein.
So now the nature of the mind is found three-fold to be,
Yet all these three parts in themselves have not sufficiency
For making sense, as fact forbids to aught of them to trace
Sense-breeding motions, and what men by mental grasp embrace.
So, in addition to the three, necessity lays claim
To some fourth element,—and this is quite without a name,—
Than which no thing more mobile, or more slender, is in thought
Conceivable, or from more smooth or tiny atoms wrought.

This sense-producing movements first distributes through the frame
For it is soonest stirred, as out of smallest shapes it came
To be, then warmth from it, and then breath's viewless forces get
Their impulse, air the last; and thence all else at once is set
In motion: blood is shaken up, then flesh begins to feel
Sensation, which will after through the bones and marrows steal,
Whether the feeling pleasure be, or pleasure's opposite.
Yet pain has not a random power of penetrating quite
So far, nor can a grievous hurt pervade the frame, without
Making such hubbub that the life itself is driven out,
And portions of the soul escape through all the body's pores.
But commonly such action is arrested at the doors
Of body, so to speak; and thus we manage to survive.

Now would I fain in words explain in what way these contrive
To mix, what their arrangements are, and how each acts on each,
But cannot, for the poverty of this my native speech
Frustrates my will: but try I must in brief, and as I may,
To summarize. Well then, their first-beginnings in such way
Run into one another by their movements, that no one
Can be dissundered, or apart become a force alone;
But all, as 't were, are many powers in one same form combined.
Just as in every sort of flesh of animals we find

Colour, and smell, and flavour, though these attributes will all
United make a body one and individual;
E'en so do warmth, and air, and breath with strength unseen, unite
To make one nature, blending with that nameless, mobile, slight,
Force, which communicates to all their primal origin
Of sense-begetting motion stirred through all the flesh within:
For in its very lowest depths this hidden nature cowers,
Nor is there aught beneath it in this human frame of ours,
Nay it is even of the soul itself an inner soul.
For just as, mixed in all our limbs and through the body's whole,
The latent powers of mind and soul's pervading forces dwell,
Because composed of atoms few and scarce divisible;
So too this power, that lacks a name, is of the most minute
Atoms composed, and deeper lies concealed, and is, to boot,
The soul's own inmost soul, and lord of all the body's frame.

And breath and air and warmth alike, for reason just the same,
Must be for exercise of force in all the joints combined,—
Though one anon will press in front, anon will lag behind,—
To prove that but a single power is out of all create;
Lest warmth and breath should go apart, or air should separate
Its strength from both, and either thus withdrawn should sense abate.

For warmth must needs be in the mind, to call upon when rash

Wrath overboils, and eager eyes with angry lightnings flash;
And much cool breath is there, that loves to come in terror's wake,
To raise a trembling in the limbs, and set the joints aquake;
And tranquil air holds also there its station, when the mien
Remains unruffled, and the breast is perfectly serene.
But there is most of warmth in those in whom a keener heart
And hotter temper easiest the fires of anger start;
And among these the violence of lions seems to own
First place, who often burst their hearts with roaring, when they moan
Unable to control the floods of fury in their breast.
Whilst the cold temper of the stag is more by wind possessed,
And far more quickly through its limbs sets going chilly breath,
Till all its joints get quivering its sheeny skin beneath.
But the calm nature of the ox lives more by tranquil air,
And neither does the torch of wrath with lurid smoky glare
Ever excite it, wrapping it in shades of blinding gloom,
Nor does it turn, transfixed by shafts of icy terror, dumb,
But betwixt stags and lions holds a sort of middle room.
And so it is with human kind. Though culture polishes
A certain lot of men alike, there still are vestiges
Of his mind's earlier nature left behind in every one.
Nor may we think the roots of ill are ever so far gone
That one will not more easily to bitter wrath be stirred,

Another sooner fall a prey to terror, and a third
Put up with disagreeables more tamely than he ought.
And thus in many other points the bent his nature brought
To man runs various roads, and aye drags habit in its train;
Whereof the secret causes I cannot as yet explain,
Nor find out all the names of all the primal origins
Of shapes, from which this difference in perfect things begins.
But one thing hereabout I feel full able to declare,
That nature's inborn traces have in us so small a share,
Which may not out of us by truth and argument be driven,
That naught forbids our living lives worthy of gods in heaven.

Wherefore this compound is within the body held at large,
And is itself the body's guard, and has its health in charge:
Because its parts are rooted altogether, and, 't is plain,
Cannot be rent apart without the ruin of the twain.
For as it is no easy job to tear away the smell
Of lumps of frankincense, and not destroy the gum as well,
So is it hard the mind and soul in such a way to rend
From out the frame, as not thereby the whole of it to end.
Both so far from their very birth by first-beginnings are
Woven together, and are made a common life to share.
And not without the other's force to help has either one,
Body or mind, it seems to us, the power to feel alone.

But sense by common movements set agoing 'twixt the two
Is kindled into life in flesh, its proper work to do.
Besides, the body by itself has never yet drawn breath,
Nor grown in bulk, nor shown the power of lasting after death.
For not as water's moisture oft throws off imparted heat
And is no whit dismembered, nor a jot the less complete
For that; not thus at all, I say, can joints and sinews bear
Their loneliness, when soul goes forth apart to wing the air,
But by the rent die suddenly, and quickly rot away.
Thus are the body and the soul from their primeval day
In mutual connexion joined life's passages to try,
Ay even when unborn within a mother's womb they lie;
So that without the death of both no severance can be:
And as their cause of safety lies in union, thou may'st see,
Their nature also must be joint, at least in great degree.

And now, if any one protest that body has no share
In feeling, holding only soul, indwelling everywhere
Throughout it, able to sustain the movement we call sense;
With facts most manifestly true he stands at difference.
For who shall e'er explain to us what 't is when body feels,
Better than fact self-evident which simple truth reveals?
But, when soul leaves it, body keeps no feeling all alone,
Because it loses what in life was never quite its own;

As soul oft loses many powers, ere it itself is flown.
Again to say that eyesight naught by its own power perceives,
But that mind looks through it as through a door's back-folded leaves,
Is hard of proof, a saying which the sayer's sense denies:
For sense it is that draws mind out and drives it to the eyes;
The more because we oft can not see things exceeding bright,
Since our lights are embarrassed by their overwealth of light:
But folding-doors are different; and not because we see
Straight through them do the doors endure or risk or injury.
Nay further, if the eyes perforce the part of doors must play,
The mind should better all things see, (so common sense would say,)
If eyes with posts and leaves and all were taken clean away.

Now on these points use special care, and take not for thine own
Opinions which the much revered Democritus lays down,
That first-beginnings of the mind and frame alternately
Are laid together one by one, and knit the limbs thereby.
For as the soul's first elements are tinier by far
Than those from which the body and the flesh compacted are,
So are they also fewer in their number, sparsely strewed
Among the joints at all events; and hence we may conclude
That, just as certain atoms, which upon the body fall,

And barely have the power to wake the sense, are wondrous small,
So 'twixt first elements of soul must be the interval.
For as we seldom see that dust, whene'er we take a walk,
Clings to our skin, nor often feel the settlement of chalk
Upon us, nor perceive it when we meet an evening fog;
As slender spider-webs in vain unconscious footsteps clog,
And the same creature's shrivelled slough unheeded on our heads
Would tumble, like birds' feathers, or the down from thistle beds,
Which from excess of lightness find it hard to fall at all;
As we know nothing of their paths, when living insects crawl
About us, nor are cognizant of each variety
Of footfall on our body set by gnat, or fly, or flea;
So too inside the body must no small commotion rise,
Before soul's first-beginnings can be stirred in anywise
To feel the seeds, which through our joints our bodies penetrate,
And ere, by knocking each on each in their divided state,
They run to meet each other, join, and forthwith separate.
But mind of the stronghold of life has far more full control,
And is more thoroughly its lord, than is the force of soul.
For without mind or intellect 't is quite impossible
That any part of soul should in the frame an instant dwell.
And when mind goes, soul follows in its company, and cleaves
The air, and in the cold of death the chilly members leaves.
But he remains alive in whom the mind unhurt is left:

Yea though his trunk be mangled, and his limbs on all sides reft
Away, and much of soul with loss of limbs be lost or fail,
He yet can live, and yet the breath of vital air inhale.
E'en if he lose great part of soul, so not quite all be gone,
The man still perseveres in life, still steadily holds on:
As when the eye is mangled, if its apple be but quite
Unharmed, the body still retains the living power of sight;
Provided that to the whole ball such damage be not done
By cutting round it as to leave the pupil all alone;
For this without the total loss of sight could never be:
Whilst if that tiny centre of the eye by injury
Be eaten out, light fades at once and darkness follows fast,
Although the brightness of the ball be nothing overcast.
And soul and mind on just such terms are bound from first to last.

Come listen now, and learn how minds and souls as light as breath
Are born with living things, with them are liable to death.
Truths sought for earnestly and long, and found by pleasing pain,
In verse well worth thy closest care I hasten to explain.
But take thou heed by either name to understand their whole,
And when henceforth for shortness' sake I only mention soul,
Teaching that this can die, believe that mind is meant as well:

As both are really one thing and indivisible.

So first of all, since I have taught that this of slender frame
And tiny forms consists, and forth from first-beginnings came
Smaller by far than those whereout soft water's moisture wells,
And fog and smoke arise; for this in mobileness excels
Them greatly, and by causes far more slight is set agog;
Because in fact 't is moved by mere imagined smoke and fog;
As for example when we see, though sleep has dulled our eyes,
An altar breathing steam and smoke aloft towards the skies,
For doubtless shadow-forms from these are born for us, I ween:
I now assert that, just as when an earthen pot has been
Broken, its watery contents in all directions soak
Away, and as 'mid circling air fogs lose themselves, and smoke,
We must believe that soul likewise, although at quicker pace,
Departs, and is resolved into its primal germs in space;
When once it has from limbs of man its free dismissal got.
For surely if the body, which is so to speak its pot,
Should, owing to some breakage from without, or worn too thin
By waste of venal blood, lack strength to hold it longer in,
How canst thou deem that any air could have sufficient might
To fetter it; when air, we know, than flesh is far more slight?

Again we feel that mind is born with body, that it grows
Along with it, wears out with it when life is near its close.
For just as babies toddle round on tender limbs that quake

From weakness, so their baby minds are feeble in their make:
And next when youth's maturity to prime of vigour grows,
Mind also greater energy and deeper insight shows:
And lastly when, unable with time's strong assaults to cope,
The body has been shaken, and the limbs grow dull and droop,
Intelligence goes lame, speech dotes, mind quickly slips away,
And all at once is lost or strayed, with naught to make delay.
So it seems natural and right, that soul should also share
In dissolution, and be spent like smoke amid the air.
Since soul too as we see is born, and waxes by degrees
With flesh, and, as I showed, is shent with flesh by eld's disease.
Add now to this that, just as flesh must oftentimes sustain
Severest illnesses, and fits of agonizing pain,
So mind is liable to grief, and fear, and bitter cares,
And therefore in a common death appropriately shares.
Mind furthermore will oft go wrong from bodily distress,
And wander, lose its wits, and talk all kinds of foolishness;
And otherwhiles will sink into a lethargy so deep,
With nodding head and eyelids drooped, as ne'er to wake from sleep,
Whence it can neither hear the voice, nor recognize the face,
Of kinsfolk fain to call it back to life's accustomed place,
As they stand round, while briny tears their face and cheeks bedew.

Therefore we must confess that mind to dissolution too
Is subject, since the contact of disease can reach thereto.
For pain and sickness both alike death's handicraftsmen be,
As we long since by many a loss have learned too thoroughly.
Once more why, when the fiery strength of wine has entered in
And travelled through the human frame, till all the veins begin
To feel its heat, does heaviness of limb ensue? and why
Comes hesitance of legs and tongue, and swimming of the eye,
And haziness of mind? and whence do hiccoughings and cries
And angry words, and all such things as follow suit, arise?
How comes all this, unless because the ardent vehemence
Of wine has power within the frame to trouble mental sense?
And whatso thus is put to rout, and found so much at fault,
Shows that, if it should e'er incur a stronger foe's assault,
The short result would be its death and utter nothingness.
Again a man will oft, constrained by sudden illness' stress,
Fall down before our eyes, as though a thunderbolt had smit
His body, foaming at the mouth, and moaning, in a fit,
With quivering limbs, and raving words, and muscles taut and bent,
And fitful gasping, till his strength in tossing has been spent:
And this because his ailment's force through all his joints dispread,
Ruffles him till his soul froths out, as ocean-billows shed
Their foam, by mighty storm winds tossed and churned and buffeted.

Moans too find utterance because the limbs are racked with pain,
And specially because the seeds of voice are by its strain
Cast out, and by the mouth in shape compact go forth abroad
As words are wont where they can find a fairly beaten road.
And craziness ensues because, as I have striven to show,
The troubled powers of mind and soul at once asunder go,
Torn piecemeal by the fury of this poisonous disease.
But when the acrid humours, which have caused the body these
Distresses, ebbing, slink to their old lurking place away,
The man gets up, still staggering, to gather as he may
His wits together by degrees, and win his soul again.

Well then, if mind and soul, while in the body they remain
Are troubled so by sickness, and so sorely rent by pain,
How think'st thou these without the flesh, alone in open air,
Could keep alive where mighty winds find constant thoroughfare?
And since we see that mind as well as body can be healed
When sick, and medicines over both controlling action wield,
This gives us further evidence that mind but lives to die.
For whosoe'er in mind a change would fain begin to try
To make, (or e'en would rearrange whatever else thou list,)
Must naturally add some parts, or their position twist
Awry, or else at least withdraw some morsel from their whole.

But things immortal suffer not that change at all control
Their parts' arrangement, nor are less or larger ever found.
Nay aught, whose alteration haps to pass a certain bound,
Causes at once the instant death of what it was before.
Therefore, if mind or sicken, or be changed by doctor's lore,
It shows, I say, in either way proof of mortality.
So far does truthful fact resist the sheer hypocrisy
Of lying reason face to face, and, all retreat offshut,
Its allegations, take what line it will, as false rebut.

Once more we often see life's light burn gradually dim
In men, and watch while vital sense deserts them limb by limb:
First we behold the toes and nails turn livid as they die,
And after these the feet, and then the legs, till by-and-bye
Death's icy footsteps slowly o'er the other members climb.
Since therefore soul hereby is rent, and at no single time
Comes forth in oneness whole, we must esteem it mortal too.
But if thou happen to suppose that, by withdrawing through
The joints, man's soul in one retreat its parts can congregate,
So dragging feeling out of all the limbs left desolate,
Why then the spot to which such store of soul its way has found
Ought certainly with ampler wealth of feeling to abound.
But as naught happens in this way, but, as I said just now,
'T is shred to bits and spread abroad, it therefore dies, I trow.

Nay more than this: just for the nonce we'll reckon falsehood true,
And grant that soul can concentrate itself in persons, who
Are on the point of leaving light, and dying bit by bit.
Still not the less for this must soul be mortal, not a whit.
What does it matter whether it be scattered on the breeze,
Or, huddled in a mass, grow dull by process of disease?
Since more and more through all the man the founts of feeling fail
In either case, and less and less the lees of life avail.
And, inasmuch as mind is part of man, and aye abides
Set in a certain place, like ears, and eyes, or aught besides
Whose senses guide the course of life; and just as each of these,
Hands, eyes, or nose, cannot from us be parted, shouldst thou please,
Without the loss of feeling, ay and e'en identity;
But by decay would waste away and that right speedily;
So mind cannot subsist alone without the human frame,
Which seems as 't were to be its pot, or anything, whose name
Implies connection closer still if possible with mind,
Because in fact the closest ties thereto the body bind.
And once again the powers of mind and body, vivified
By mutual union, thrive, and o'er a healthy life preside.
For neither, save with bodily assistance at command,

Can mind alone cause life to move, nor yet on th' other hand
Can body reft of mind still live, or feeling utilize.
For just as when from out the frame, rent from their roots, the eyes
Are torn away, forthwith their gift of seeing objects fails;
So soul or mind ta'en by itself alone no whit avails;
And this because through veins and flesh and bones and sinews blent
Their first-beginnings are obliged to dwell in fair content
Inside the body, and are not at liberty to roam
Abroad to mighty distances, but, making this their home,
Produce life-giving motions which, amidst the outer air
When disembodied, after death cast out, they could not share,
Since they are held together by no like arrangement there.
For air must be a body and a living thing, if soul
Can keep itself together there, and exercise control
Over its movements, as it used when nerves and frame were whole.
Therefore I say again that, when the body's covering
Is rent to pieces, and the breath of life has taken wing,
We must allow that mind and soul are equally dissolved,
Because the fate of either with the other's is involved.
Again, while soul still moves in life within the frame's constraint,

Not seldom it appears from some uncertain cause to faint,
As if at point of going, fain to win entire release
From body: eyes then droop as at the moment of decease,
The trunk looks bloodless, all the limbs are limp and like to fall.
As haps when people talk of mind 'gone wrong,' which others call
Soul's 'flitting'; when around is dread and bustle in the strife
Of love to keep firm hold upon the last weak links of life.
For then the mind is shaken on its seat, and all the might
Of soul with body's self slips fast down the steep slope of Night,
And would go o'er it, were the push a feather-weight less light.
In fine, as body never can endure soul's parting thence
Without producing by decay smells of most rank offence,
Why doubt that from the innermost recesses of the frame
All the soul's strength has gathered, passed, and scattered in the same
Way as does smoke; and that the flesh collapses with such change
To rottenness and ruin, just because the lowest range
Of its foundations is displaced, when soul is forced to fare
Through joints and all the winding ways, which in the body are
Its doors, abroad? So thou mayst take thy choice of many a road
To make thee sure that through the joints the soul is cast abroad
Piecemeal, and eke was shred to bits within the body, ere
It could slip out to swim the waste of circling atmosphere.

And when 't is thus expelled the frame, how canst thou doubt,
I pray,
That helpless in the open air, its clothing torn away,
So far from having strength to last through all eternity,
It could not keep one minute's space its own identity.
Nor does a man at point of death appear to feel his soul
Go forth from all his many parts in perfect oneness whole,
First surging up towards the throat, from thence the jaws to win;
But seems to find it slowly fail just where it aye has been,
E'en as he feels each other sense in its locality
Weaken apace. But if the mind with immortality
Were gifted, it would scarce complain of going, when it dies,
To pieces, but of changing place and sloughing, adder-wise.

And wherefore after all are mind's advising power and will
Never begotten in the head, or feet, or hands, but still
To one set spot in parts defined held fast in every case,
Unless because to every sense for birth a certain place
Has been assigned, where what is born may afterwards abide;
And sundry joints in many ways the body so divide
That the arrangement of its parts can ne'er get upside-down?
Result so throughly follows cause; as flame is never known
To rise from rivers, and as frost is never bred of fire.
Besides, if immortality the soul alone inspire,

If soul, when severed from the frame, alone can feel and live,
It must, I take it, have been made endowed with senses five.
Nor can we any otherwise imagine means, whereby
About the banks of Acheron departed souls could fly;
And just for this the painters, and the bards of elder day,
Souls gifted with these faculties in all their works portray.
But for the soul nor eyes nor ears distinct and all its own
Can be, nor even hands or tongue; nor yet can ears alone
Have sense of hearing, or exist at all, without the frame.

Next, since we feel that vital sense, in every limb the same,
Dwells in the body, and that all its bulk is full of life,
If any power assail it all at once, and, like a knife,
Cut it midway asunder at a blow, with one piece thrown
Here, and one there, soul's force likewise, we cannot help but own,
Is sundered, cast apart, and with the body cut in twain:
But anything that deathlessness may in itself contain
Belies its nature, if it e'er be rent or separate.

Folk tell queer tales of scythèd cars, which lop at such a rate
Men's limbs away in battle, hot with indiscriminate
Slaughter, that, whilst his severed limb lies quivering on the ground
The man who lost it seems in mind and vigour so far sound
As, from the quickness of his hurt, to feel no painful wound;
But, since his soul is once for all enamoured of the fight,
With what is left of body still smites on with all his might,

Scarce conscious that mid hungry scythes and wheels and trampling steeds,
A lost left arm has robbed him of the shield he sorely needs.
Another with his sword-arm off still climbs and presses on.
Another struggles to get up with leg and thigh clean gone,
Whilst his foot dying on the earth is twitching all its toes.
So heads cut off, while in the trunk the vital warmth yet glows,
Keep on the ground the looks of life, and stare with open eyes,
Until the last remains of soul have vanished to the skies.

Moreover while a serpent's tongue is trembling, while his tail
Shoots quivering from his lengthy coil, if thine address avail
To scotch him 'twixt the two, and cut him small with blow on blow,
Thou wilt observe his pieces all go wriggling to and fro
As soon as cut apart, with gore bedabbling all the soil;
The while his fore part turns about to seek his ancient coil,
And, hurt itself, with one hot bite to ease a hinder wound.

Now then shall we assert that in each portion there is found
An undivided soul? Why so the consequence is plain,
One living body in itself may many souls contain.
That then has been divided which was in consistency
One with the body: so be thou assured that both must be
Mortal, for both in many parts are severed equally.

Moreover, if the nature of the soul is free from death,

And enters us at birth with our first draught of vital breath,
How comes it that we cannot call to mind what erst took place
In former days, and of old deeds recover not a trace?
And if the faculties of mind so wholly altered be
As not of any bygone facts to keep the memory,
There is, I trow, 'twixt this and death but little difference.
Wherefore, we must admit, the soul that was has parted hence
For ever, and the soul that is has been create afresh.
Again, if only when we are made perfect in the flesh
The quickened energy of mind is wont to enter in
Just at the hour of birth, when we are setting foot within
Life's doors, 't were hardly right that with the frame it should appear,
In common with the limbs and in the blood, its growth to rear.
But by itself it then should live in some secluded cell
Alone, though by the body still through feeling reachable.
Whereas acknowledged fact proclaims the very contrary:
Because through veins, and flesh, and nerves, and bones so thoroughly
'T is blent, that e'en our very teeth possess a share of sense;
As aches from ice-cold water or disease give evidence,
Or the rough jar of fruit-stones when we bite them unawares.
And so I once again assert that soul in nowise bears
A life incapable of birth, exempt from death's decrees;

For we can never think that it could mix with so much ease,
If from without inserted, in our bodies; and we know
That, when thus throughly mixed, it seems to lack the means to go
Apart again in safety, nor can all its efforts serve
To loose it from the hold of each small joint and bone and nerve.
But if perhaps thou deem that soul, inserted from outside,
Is wont through all these limbs of ours to scatter far and wide,
So much the more for spreading with the body must it die,
Since what is scattered goes to bits, and perishes thereby.
For just as food divided through the hollows of the flesh,
Whilst it is spread through all the limbs and joints, contributes fresh
Material by its death to things entirely different:
So soul and mind, although in full entirety they be sent
Into the new-made body, still are sundered as they spread,
Whilst, through the body's hollows to its limbs partitioned,
Those particles are broadcast sown, wherefrom that sort of soul
Derives its life which o'er our frame thenceforward wields control,
Born of the soul which died when rent among the limbs to fare.
Therefore these arguments, meseems, conclusive witness bear
That soul of birthdays and of death is not without its share.

Once more within a lifeless corpse do any seeds of mind

Remain, or not? For, if but one therein is left behind,
We cannot any more with truth assert that minds possess
Unending life; since each departs, though only little, less.
But if souls quit and fly away with every portion sound,
So that no remnant can in all the body's parts be found,
Whereout from corpses, which begin to stink, do swarms of worms
Come forth, and whence begot does such a host of living forms,
Devoid alike of bones and blood, seethe through the swollen mass?
But if thou haply chance to hold that into worms can pass
Souls from outside them, so that each body may have its own,—
Nor wonderest why to the spot, whence only one has flown,
So many thousand souls should throng,—this question certainly
Ought to be asked, I think, and put to test decisively;
Do souls in this case severally hunt out the tiny seed
Of worms, and build themselves therein the dwellings which they need?
Or must they be inserted when the worms are fully grown?
Now wherefore they should set to work to build has yet been shown
No cause, nor why they toil. For just through being bodiless
They flit unworried by disease, unvexed by hunger's stress,
Or cold; while flesh, as more akin, more suffers from such ails,
And body's contact e'en on mind a thousand griefs entails.

Nay, were it ne'er so well for souls to build themselves a home
Of flesh to dwell in, means at this desired result to come
Were wanting; so souls make not joints and bodies for their use.
On the other hand no means exist, whereby to introduce
Souls into finished frames, nor then could these be intertwined
With such minuteness as to cause consent of flesh and mind.
Why furthermore does violence of temper haunt the seed
Of sullen lions, craft the fox, the deer fleet-footed speed?
Why in all other kinds of beasts does every character
Of limb and bent from life's dim dawn unvarying recur,
Unless because distinctive force of mind, from breed and race
Derived, with all the body grows at no unequal pace?
If this were deathless made, and wont to alter its abode
From time to time, then animals must needs of changeful mood
Be found: then rough Hyrcanian hounds would oft be seen to fly
The onset of an antlered hart; athwart the breezy sky
Hawks would go down the wind before the coming of a dove;
Man would be reasonless, wild beasts would full of reason prove.
For this contention surely rests on faulty argument,
That deathless souls with change of place can also change their bent;
Since what is changed is sundered, and in sundering things die,
Because their parts get out of place and rearranged awry.

Wherefore 't is right that through the limbs dissevered they should
wend,
That so the life of all of them with body's life may end.
But if folk say that human souls are never blended, save
With human forms, and so forth; I would ask how such as have
Learned wisdom grow so silly? why are children ne'er discreet?
Why are mares' foals incompetent with hunters to compete?
They will allege by way of shift, no doubt, that weakly frame
Makes weakly mind. Well! be it so. Still must thou all the
same
Confess that soul is mortal: since, where such a difference
Springs from its frame, it parts in fact with former life and sense.
By what means too in any like degree could mental power
Wax with the frame wherein it dwells, the enviable flower
Of prime to reach, unless they were companions from the first?
What does it want in longing from decrepit limbs to burst?
Fears it to stay shut up inside the mouldering body's thrall,
Lest its old home in weariness of length of days should fall
And bury it? Why! deathless things incur no risk at all.

Again that souls at Venus' rites and wild-beasts' births should
be
Always in readiness, methinks were sheer absurdity.
What? things immortal thronging round in number numberless,

Expectant of new mortal limbs, with haste of rival press
First come to be first served, and so get place to enter in!
Unless forsooth sworn treaties have been made among the kin
Of souls, that whoso in her flight comes first has won the right
Of entry, and they thus avoid the need of matching might!

Once more a tree in ether's space, a cloud amid the sea,
A shoal of fish on farming land, or blood in carpentry,
Or sap in flint-stones cannot be, nor being could survive.
One state has been decreed and fixed where each may live and thrive.
So birth of mind cannot take place without some bodily
Surrounding, and can ne'er apart from blood and sinews be.
But if the force of mind, (for this were likelier by far,)
Were privileged to seat itself where head or shoulders are,
Or in the bottom of the heels to choose its birth-place, it
Still its one human packing-case would not leave have to quit.
Whilst, as plain fact declares that e'en in this small frame of ours
Determined places seem assigned in which the several powers
Of soul and mind can live and grow apart, that these outside
The body can be born, or last, is all the more belied.
So, when the body has deceased, we needs must own that, through
Its whole extent to pieces rent, the soul has perished too.

For dying things to join with things that cannot die, and think
Oneness of feeling, mutual accord, from such a link
Could flow, were folly. Could we deem aught more incongruous,
Could aught of jars reciprocal more fruitful seem to us,
Than that eternal deathless souls should, penned in mortal form,
Be forced in company to bear the brunt of every storm?
But if perchance men deem the soul with life unending crowned,
In that it dwells from deadly things securely fenced around;
Because whate'er could work its bane either comes never near,
Or coming with malign intent will somehow disappear
Repulsed e'er mind has time to find what damage it could do:
Be sure such theory is quite the opposite of true.
For let alone its ailing when the limbs with pain are racked,
By terror of mishaps to come it often is attacked
And shorn of strength, it sickens with alarm, it gets worn out
With care, it feels remorse for wrongs it erst has brought about.
Nay more than this at times it turns forgetful, or will rave,
Whilst flesh is sound; at times it sinks in lethargy's black wave.

So death to us is nothing: we with death have naught to do:
Since the true character of mind is proven mortal too.
And as in days awhile ago we suffered no despite,
When Afric's swarming legions came around our sires in fight;

When with war's perilous uproar the whole wide world for dread
Shuddered and shook, ay high as yon bright welkin overhead ;
When all mankind were in suspense to whether of the twain,
Carthage or Rome, would fall the lot o'er land and sea to reign :
So when we shall have ceased to be, when severance is done
'Twixt soul and body, which combine to make our nature one,
Nothing at all, be well assured, can hap to us, whereby
Sensation can be stirred in us, in nothingness who lie
Though earth and ocean mingled, and though sea were blent
with sky.

But e'en if, after they have left this fleshly form of ours,
Both mind and soul were able to retain their feeling powers,
Still this would nothing be to us, who live a perfect whole
Only while wedlock surely binds together flesh and soul.
Nor yet though, after we are dead, Time gather up anew
Our substance, and arrange it just as now it meets the view ;
Nay even though the light of life should thereinto return,
The fact will not our very selves in any way concern,
If once the memory of self has been cut off before.

Yea, nought belongs to us of what was once, when we of yore
Existed ; all those by-gone days afflict us with no pain.
For if across the whole expanse of endless time again
Thou couldst look back, and comprehend the vast variety
Of movement and of matter, thou couldst very easily

Conceive that these same particles, whereof ourselves are made,
Were in the selfsame order in some older age arrayed;
And yet our minds of this can no least memory recall,
Because there once has intervened a breach of life, and all
Life's movements from our feelings have been sundered far and wide.
For if a time of evil luck and misery betide,
He surely ought to be alive on whom calamity
Should fall. But as Death takes away the chance, nor lets him be
Still extant, on whose head the ill oncoming ought to bear,
'T is plain enough that we in death have naught we need to fear,
And that a man not then alive can never suffer pain;
Yea though he once was born awhile ago, to him nor gain
Nor loss is; since undying death has ended dying life.

Therefore whene'er thou seest a man fall with himself to strife,
Wroth that his body after death must in the tomb decay,
Or be devoured by fire, or torn to shreds by beasts of prey,
Know that his voice rings false, that 'neath his indignation lies
Some secret pricking at the heart, although himself denies
Belief in any consciousness of feeling when he dies.
He does not truly grant, I think, his creed, nor own its source,

He will not root him out of life for good and all perforce,
But, half unknowing, deems some part of him will yet survive.
For any one who contemplates his future, while alive,
How after death foul birds and beasts his flesh will rend and rive,
Feels sorry for himself, because he cannot set about
To separate that self enough from his own corpse laid out,
But fancies he himself in flesh that feels will still be by,
And so grows angry with himself for being born to die;
Not seeing that in real death no second self of his
Can still be left alive to mourn his own last obsequies,
Or o'er his body torn by beasts, or burnt by fire, to wail.
For if, when we are dead, the jaws and fangs of brutes avail
To hurt, I find no reason why it must not be the same,
When we are laid on blazing logs, and roast to dust in flame,
Or else are choked in honey, or when what is left of us
Grows stark and cold on the smooth slab of some sarcophagus,
Or is crushed flat by heaps of earth exceeding ponderous.

"Ah me! thy home will welcome thee with joy no more, thy wife,
The best of wives, thy children sweet, no more in kindly strife
Will race to snatch thy soonest kiss, and glad thy happy breast
With silent thankfulness: thy bloom of bliss is shorn: thy nest
Thou'lt guard no more. Unhappy man, in one unhappy day,

All the rewards of life," they cry, "are sadly swept away."
But this they all of them forget to add thereto, "and yet
None of these things occasion thee a shadow of regret."
But if their minds could see aright, their words could truth express,
Men would relieve themselves of much alarm and much distress.
"Thou, as thou liest now in death asleep, shalt so remain
For ever and for ever free from all disease and pain,"
They then would cry, "but we, who stood around the awful pyre
When thou wert burned to dust, have wept unsated, nor will tire
Of tears; eternity shall make our bosoms' grief no less."
Yet in this case the mourner should be asked what bitterness
So very great it is, if sleep and quiet be our fate,
That any one should pine for aye in grief disconsolate.
And sometimes, too, when men lie stretched around the board, with cup
In hand, while crowning garlands shade their faces whilst they sup,
They say and feel it, "Pleasure here is short for us poor men:
'T will soon have been; nor ours the gift to call it back again."
As if forsooth these worst of ills in dying they must meet,
Thirst that burns up the wretched frame, and dry devouring heat,
Or they would then be worried by the lack of any thing.
Why! none of us for self or life feels any hankering,
When mind and body both alike are quietly asleep.
For what we care, our slumber might remain for aye as deep:

No grief at having lost ourselves affects our minds at all.
Yet from their seats of movement and of sense th' original
Beginnings cannot through the limbs far off have wandered then,
Since roused from sleep a man at once collects himself again.
Death therefore surely should of less account to us be thought,—
If there can any thing be less than what we see is naught,—
Because a greater disarray of matter's total mass
Follows on death, and never man has skilled again to pass
To life, on whom th' arrest thereof has laid its icy hand.

Moreover, if the gift were ours to hear and understand
The voice of Nature suddenly thus scolding one of us;
"What, mortal, is so much amiss, that so lugubrious
To sickly grief thou yieldest? Why bemoanest thou in tears
Thy death? If joy companioned thee in all the bygone years,
If thine advantages in life were never found to fail,
Nor perished thankless, run to waste as through a riddled pail,
Why art thou such a fool as not, like some well-plenished guest,
To make thy bow to life, and hie content to careless rest?
But if thy life be but offence, if all thy garnered store
Of weal be spent and finished, why yet seekest thou for more,
To end again in evil case, like seed on thankless soil?
Were it not best to shorten life, and with it shorten toil?
For I have nothing left unused, nor any scheme can frame,

Or find, to give thee pleasure. All things always are the same.
Yea, though with years thy body did not wither, even though
Thy limbs grew never faint nor weak, all things would still be so;
E'en if thy life should be prolonged to see go rolling by
Age after age, nay even if thou never wert to die:"
What should we have to answer, save to own that Nature's laws
Were just, and her indictment showed a true and rightful cause?
But if an old man full of years, at some disease's touch,
Lie groaning over early death, and sorrow overmuch,
Will she not rightly find more fault, and rail in harsher tones?
"Hence with thy blubbering, buffoon, be off, and hush thy moans;
Thou hast used up life's prizes, now thou witherest at last:
But since thou cravest good ungot, and scornest what thou hast,
Thy life has slipped away from thee unglad, unperfected,
Till, ere thou think'st of him, grim death is standing at thy head,
Ere thou hadst time to take thy fill of joy, and go away.
Now put aside at once all dreams that suit not locks of grey,
And with grand mien and tranquil mind resign thy place: thou must."
Her urgency, her taunts, I think, her jibes, would be but just,
For ancientry in all things must to novelty give way,
And stand aside, and this must die for that to have its day:
To the black pit of Tartarus no creature need descend:
Matter is wanted to produce the ages without end,

Which ne'ertheless, their part once played, will follow after thee :
Thus like thyself the past has died, and thus futurity
Will die : thus new things out of old will never cease to rise.
Life is a gift that all may use, but none monopolize.
Look back across the endless years that went before our birth,
And see how bygone time of old to us is nothing worth.
For Nature, so to speak, herein, as in a mirror, shows
What will be in the time to come, when we in death repose.
What then seems terrible to thee? what that should make man
weep
At dying? Is not death more free from care than any sleep?

And, soothly, all the ills that folk in Acheron's profound
Profess to find, while yet we live are everywhere around.
No wretched Tantalus for one big stone, that overhead
Hangs in mid air, as fable tells, grows numb with causeless dread :
But empty awe of wrath divine distresses men alive,
Who fear ill luck, that accident may bring on them that thrive.
No vultures peck at Tityus outstretched in Acheron,
Nor could they in his vasty chest discover food, whereon
To batten through the ceaseless roll of years that know no end ;—
Nay, though his frame were really so hugely to extend
As to take up not merely nine poor acres' width of ground
With his outspreading limbs, but all the whole terrestrial round,

Not even then could he endure eternity of pain ;
Nor would his frame an infinite supply of food contain :—
But we see Tityus in him who, prostrate in the dust,
By torturing anxieties, the fowls unclean of lust,
Is gnawed, or rent by greedful cares of any other kind.
Just so a Sisyphus in life before our eyes we find
In one agape the rod and axe of ruthless power to win
From rabble votes, aye going home repulsed and sad of mien :
Because to seek for empty rank, and rank they never give,
To bear the stern duress of toil, and all in vain to strive,
Is but to push with might and main up a confronting hill
A massive stone, which, when it just has neared the summit, will
Slip, and run back by leaps and bounds the level plain to find.
Again to feed incessantly the hunger of the mind,
Which with good things is never filled, is never satisfied,
As we are with the seasons of the year, when every tide
Returning brings its produce back and changing means of joy ;—
Though howsoever long we pluck life's fruits they never cloy :—
This, I conceive, is imaged by the blooming maids who pour,
As legend has it, water in a tub without a floor,
Which nowise can be brimmed although they labour evermore.
Cerberus, and the Furies too, in fact, and endless Night,
And pitchy Styx, and Phlegethon that glooms with lurid light,
Stern Minos, and Ixion's wheel that turns and never tires,

And Tartarus that belches from its jaws terrific fires,
Are dreams of what nowhere exists, nor anywhere can be.
But dread of suffering for deeds in life done evilly
Makes often notable amends for sins as notable.
The gaol, the awful hurling off the rock, the thongs of hell,
The torturers, the rack, the pitch, the torch, the redhot steel,
Though none of these exist in fact; self-conscious souls may feel
Foreboding awe of stinging thongs, and fright themselves with fear
Of rods to come, and, seeing not the means of ending here
Their troubles, nor the way in which their sufferings must cease,
May grow alarmed lest after death these evils should increase.
The life of fools makes here in time a hellfire of its own.

This too thou mightest whisper to thyself when quite alone
Sometimes, "The pious Ancus' eyes behold not sunshine now,
Who was, thou rogue, by many points a better man than thou;
And many kings and conquerors, the mightiest of men,
O'er mighty peoples holding sway, have come to naught since then.
Even the despot who of old athwart the briny waves
First spread a path, and showed the way to legions of his braves
To cross their depths, who taught his troops to tread the salt lagoons,
Who flouted ocean's muttered wrath, when over his pontoons

His horsemen rode, with body's death was reft of soul and light.
The Scipios' son, whom Carthage feared, the thunderbolt of fight,
Gave earth his bones, as though he were the meanest serving-man."
Again the roll of men renowned for wit or learning scan ;
The bards with whom the Muses deigned sweet company to keep,
Whose one grand master, Homer, sleeps as sound as others sleep;
Look at Democritus who, when the fulness of his time
Warned him his powers of memory no longer were at prime,
Surrendered life of pure free-will, solicited by none ;
Even Epicurus died, his torch burnt out, his race well run,
Who passed all human-kind in gifts, and dimmed their lights as far
As heaven's bright sun at rising dims the glimmer of a star.
Then wilt thou hesitate, and count it hard that thou must die?
Whereas thy life is merely death alive, although thine eye
Still sees, who wear'st thy greater part of time in sleep away,
Snoring awake, and dreaming dreams throughout the livelong day,
Bearing about in thee a mind by empty terrors wrecked,
Although the source of all thy wrong thou dost no whit suspect;
While like a tipsy man thou sway'st now that way and now this,
As body's countless worries drive, or mind's vague miseries.

Oh ! if men only had the skill, just as they feel the weight
That loads their souls; and wears them out with pressure soon or late,

As clearly to discern the springs that cause their sore unrest,
The source whence such a pile of woe lies heavy on their breast,
They would not live as now they live, as far as we can see,
Where no one knows what 't is he lacks, and all search wearily
For change of scene, as if thereby they might put off their load.
The master of a spacious house goes oftentimes abroad,
When weary of home's sameness, and as suddenly will come
Back, when he nothing finds elsewhere to please him more than home.
A man will drive his trotting bays at racing speed from town,
As if to save his country house at point of burning down,
Then scarcely drag his feet across the hall without a gape
To court in sleep's forgetfulness a little self-escape,
Or even to the city will as quickly hurry back.
'T is thus men fly from self, (though self, as folk are found, alack!
Allows no runaways, and clings in spite of us,) and hate
Self, as men sick, who yet know not the cause of their estate.
This if we could but clearly see, each man would leave behind
His own affairs, on Nature's laws to concentrate his mind:
Because for all eternity, and not the little space
Of one short hour, their standing is at stake, when mortals face
The endless doom awaiting them when locked in death's embrace.

And after all why yield to ill desires of living long

At so much pains 'mid all the alarms and risks that round us throng?
A certain end of life is set for all of mortal race:
Death can nowise be shirked: we all must meet him face to face.
Besides we run in one old groove; as we have always gone
We still must go: we hit on no new joy by living on.
But while we have not what we want, we deem the thing we crave
Worth all besides; when that is ours, some other we must have,
All open-mouthed with constant thirst to live, and so to win.
But all is doubt, what state the days to come will find us in,
What chance may bring us, whether our last end be foul or fair.
We cannot by prolonging life make shorter by a hair,
Or shred an atom from, the time which we in death must pass,
So as to lie perchance less long a while beneath the grass.
Though thou shouldst live to see the world age after age go past,
Eternal death will none the less await thee at the last.
Nor will that man have lesser space of sheer nonentity,
Who late on yestereven made an end of life, than he
Who many months or years ago put off mortality.





BOOK IV.

OF THE SENSES.



BOOK IV.

Amidst the Muses' pathless realms I roam where no man's tread
Has worn a track before; I love the virgin fountainhead
To reach and quaff; it pleases me new sorts of blooms to cull,
And thence to weave me for my head a chaplet wonderful,
Such as the Queens of song ne'er wove to wreathe a mortal brow.
Chiefly because of mighty things I treat, essaying how
From superstition's cramping bonds the mind of man to free:
Next since on so obscure a theme with such lucidity
I frame my verses, touching all with grace of poesy.
And this no whit inconsonant with reason will appear:
For just as doctors round the rim of cups are wont to smear
Sweet juice of yellow honey as they tax their skill to try
To get their nasty absinth down the throat of infancy,
And so the unsuspecting years of babyhood beguile
Lip far at least, the bitter draught of wormwood-juice the while
The patient gulps, not taken off through being taken in
But feeling rather health and strength thenceforth afresh begin:

So I too now, because abroad my course of argument
Seems somewhat harsh to folk who ne'er their thoughts thereon have bent,
And common people turn their backs in horror, wish to thee
My system to expound in suave Pierian poesy,
Touching it with the sweetness of the Muses' honeyed strain,
In hope by such a plan thy full attention to retain
Fixed on my verses, till thou look'st with understanding view
On all things' nature, and perceiv'st their uses through and through.

Now then, as I have taught thee what the nature is of mind,
And of what things 't is made, and how it flourishes combined
With body, or withdrawn to first beginnings turns again,
I will begin to touch on points which thereunto pertain
Most closely; how there are what we call semblances of things,—
Which, as it were a cast-off skin, abroad their body flings
From off its surface, to and fro to flit about the air:
And these are they which meet us in our waking hours, and scare
Our minds, or when we lie asleep, and wondrous forms we see
And likenesses of those long lapped in death's obscurity,
Which wake us oft in fearful wise when slumber lies upon
Our languid limbs:—lest we should deem that souls from Acheron
Have chance of exit, or that ghosts among the living fly,

Or else that something of ourself survives us when we die ;
When mind and body, both at once extinguished, from their place
Depart asunder into first-beginnings loose in space.

Therefore I say that likenesses and forms of slender shape
From the extreme outside of things from time to time escape,
Which we a web of tissues or a rind might fairly call,
Because its semblance wears a look and form alike in all
Points to the substance wherefrom it was shed to wend apart.
This surely any man may learn, however dull of heart.
In the first place as many things in open glare of day
Give bodies off; and some of these in loose diffusion stray,
As smoke is given off by logs of oak, and heat by flame ;
And other some are closer wove and more compact of frame,
As when the katydids their smooth round coats are wont to doff
In summer time, and calves at birth the slender cauls throw off
Which wrapped their bodies: or as when the slippery serpents leave
Their cloaks behind among the thorns, for often we perceive
The bramble bushes rich with sloughs, the spoils of fugitives.
Since these things happen it results that every thing that lives
May from its surface have the power thin likenesses to throw.
For why these things should fall away, or quit their substance so,
More than the subtle, not a word of hinted reason is

Suggested: since especially upon things' surfaces
Are many tiny bodies, which in order could be thrown
As erst, and thus could keep the form and shape of old their own,
And that with far more speed, as these from fewness would be wont
Less to be hampered, and because their place is quite in front.
For surely we see many things give forth and widely spread,
Not only from their inward depths, as we before have said,
But also from their surface forms, and even colour too;
As commonly occurs when shades of orange, red, and blue,
Fall from the awnings which above large theatres we bind
To wave and shudder over poles and crossbeams in the wind.
For there the crowd that throngs the seats, the stage's splendid show,
The seemly gathering withal of senators arow,
They tint, and force to move about endowed with borrowed dyes.
And in proportion as the walls of theatres arise
Higher, and shut them closer in, the more in colour's play
All these are bathed, and laugh outright through scanted light of day.
Therefore as linen awnings from their surface coloured light
Give off, all other objects must be able very slight
Likenesses to emit, since both from surfaces are thrown.
So here we find sure traces of the forms, which, I have shown,

Flutter around endowed with bulk so infinitely small
That, taken by themselves apart, they are not seen at all.
Again all smell, and smoke, and heat, and other things which these
Nearly resemble, gush abroad of loose consistencies,
Because in coming from the depths, as being formed inside,
They get much rent through windings of their roadway, and no wide
Gates at its end, whereto to turn for issue, open stand.
But when of outer colouring upon the other hand
The thinnest skin is given off, naught can its body tear
Since, hard at hand and set in front, it finds its passage clear.
Lastly as to resemblances, which we in mirrors see
Or water, or aught else that shines, all of necessity,
Because the look they wear of things a faithful copy is,
Must have their outline formed from these by cast-off images.
And why those bodies more should fall, or quit the form they well
Have borne, which many things throw off with size quite visible,
Than thinner ones no whispered cause can prove allegeable.
So that there are thin forms of things and portraitures is shown;
And that these, though no man has power to see them if alone,
If frequently reflected and thrown back repeatedly
From mirrors' polished surfaces return their effigy.

And by no other plan, it seems, could they be kept at all,
So as to be restored in look and shape identical.

Now come, and I will teach thee of how thin a nature are
These semblances. And first, as first-beginnings are so far
Beneath our senses' cognizance, so many times more small
Than those which our eyes first begin not to perceive at all,
To make this even stronger, now learn briefly, an thou list,
How subtile are the elements whereof all things consist.
Some kinds of living creatures, to begin, exist so wee
Of shape, that man can by no means observe one out of three.
What then in such must we suppose the great intestine's size?
What are their limbs and joints? and what their girth of heart or eyes?
How passing small they are! And then the first-beginnings whence
Their soul by nature must be formed, and their intelligence,
Seest not how far too small they are and subtile for our sense?
Moreover whatsoever things breathe forth a pungent smell
From leaf, or root, or blossom,—like heal-all, and wormwood fell,
And heavy-scented southern-wood, and bitter centaury;
Whereof shouldst thou rub any one however carelessly
Betwixt two fingers,— . . . .
But rather know that semblances of many a form and hue
In many manners wander, void of force and feeling too.

But lest thou think that those, and those alone, have power to stray,
Which, being parts of real things, in likeness go away,
Learn that there are some self-begot and self-sustained to fare
About that lowest tier of heaven which we entitle 'air.'
These, wrought in many ways, are borne aloft across the sky,
And, being fluid, alter all their look unceasingly,
Turning themselves to outlined forms of every sort and kind.
Thus we from time to time behold the clouds above combined
With ease, the tranquil brightness of the firmament to mar,
Stirring the air with movements soft. For often giants are
In outline seen to fly, and spread their shadow far and wide:
Sometimes a mighty mountain, with vast rocks that from its side
Are torn to go before it, seems to pass before the sun;
And then some huge wild-beast drags on the rain-clouds one by one.

Now how our images arise with so much ease and speed,
And evermore from objects pour, and evermore recede,
I will unfold. Bid thou thy mind observe my reasonings.
Well then, a somewhat uppermost aye streams away from things,
Which they throw off; and this, when on some other things it falls,
Goes through them, as through glass to wit; though, when on rugged walls
Of stone or wooden matter it alights, 't is there so rent

Asunder, that thence forth it can no semblance represent.
But when things meet it which possess well-polished surfaces
Although opaque, whereof the first are mirrors, naught of this
Occurs, for neither can it then go through them as through glass,
Nor is it rent; its safety from their smoothness comes to pass.
Wherefore it haps that these such floods of semblances supply
That, if thou shalt at any time, however suddenly,
Aught opposite a mirror set, its image straight will show;
To teach thee that thin webs of things, and shapes as slender, flow
Off from their bodies' surfaces without or let or stay.

Thus likenesses in briefest time are got in such array,
That we their birth exceeding quick with ample reason call.
For, as 't is needful that the sun should many rays let fall
In briefest time to fill the world with unremitting light,
So too must many likenesses of things be borne, in quite
As short a space of time, for just the selfsame reason, far
And wide to all surrounding spots by methods similar.
Because, where'er to shapen things a mirror we may turn,
Things answering in likened form and tint we there discern.

Moreover when the aspect of the sky but now was clear
And calm, how quickly foul and rough with rack it will appear,
Till one might think that all the shades of darkness had been driven
To quit their Acheron, and fill the spacious vaults of heaven:

To such extent do faces full of midnight's pitchy dread,
Born of the storm-cloud's frightful murk, hang down from overhead!
And, in comparison with these, how great the littleness
Of any semblance must be, words are powerless to express.

Come now, with what velocity of movement semblances
Are borne, for crossing air with speed how fit their nature is,
So that but little time is spent in endless length of space,
Wherever each with tendency diverse to its own place
Proceeds, in verses rather sweet than lengthy I will tell:
Just as the dying swan's few notes in melody excel
Cranes' noisy cries that earthward down from southern cloudlets swell.

First then we oftentimes may see that light things, of minute
Bodies compacted, are indued with speed of pace to boot.
And in this category are the solar light and heat;
Since of small first-beginnings they are made; and these are beat,
As 't were, nor hesitate to cross the middle space of wind
And emptiness, impelled by blows that follow from behind:
For ray on ray the light is made incessantly to fall,
And flash is hastened on by flash without an interval.
Wherefore our semblances must needs be able just as well,
For reasons similar, to pass through space unspeakable
All in a moment's time, because a master motive-force,

Though small and far behind, impels and drives them on their
course,
Where furthermore their lightness of itself would wing them fast:
And next because their texture is so thin when they are cast
Adrift, that through all sorts of things with ease they take their
road,
And through the intervening air spread widely all abroad.
Moreover if the tiny forms emitted from within
The very inmost depths of things to pass outside are seen,
As solar light and heat do, when, at dawning of the day,
Across the whole expanse of sky diffusèdly they stray,
Fluttering forth o'er sea and land, and flooding all the heaven;
What then of those to which a place already has been given
In front, when they are cast adrift with nought that can delay
Their progress? See'st thou not how much more swiftly on their
way
They ought to go, and farther too; and whilst with light the sun
O'erspreads the sky, a longer course by many times should run.
This too appears a token true, a host of signs among,
With what quick motion likenesses of things are borne along;
Soon as clear water is put down in open air to lie,
Immediately bright groups of stars, if starlit be the sky,
Out of the water's quiet face respond to those on high.
Now see'st not hence how images may in a moment's time

Fall down from shores ethereal to this our earthly clime?
So we must own that bodies can from bodies outcast be,
To strike our eyes and challenge sight and that repeatedly.

Strong odours too from many things are wont to flow for aye;
And cold from rivers rises, heat comes from the sun; and spray
From ocean-waves is thrown to eat stone sea-walls fast away:
So various noises ceaselessly in air are wont to fly:
Lastly a flavour of damp salt comes in our mouth when nigh
The sea we stroll: on the other hand whene'er we see a mess
Of absinth brewed we feel at once a taste of bitterness.
With such persistency from things are others borne aside
With constant flux, and cast adrift to wander far and wide.
And of this flowing no delay nor pause is ever found,
Because we may at any time feel any thing around,
Or see and smell it if we please, or listen to its sound.

Again because an object, which we handle when the night
Is dark, is recognised to be the same that meets our sight
In day's clear sunshine, it results that touch and vision are
Affected of necessity by causes similar.
Now then, if in the dark we feel a square, and take away
Certain impressions thence, what else that 's square in open day,
Except its image, can upon our sense of seeing fall?

Wherefore 't is manifest the cause of seeing comes to all
From likenesses, and not a thing without them can be seen.

And now these semblances of which I speak are borne, I ween,
In all directions, broadcast strewn on every side to lie;
But, since we only have the gift of seeing with the eye,
It haps that on whatever point we concentrate our view
All objects strike upon it thence of every shape and hue.
The likeness too supplies us with discerning power to see
How great the distance 'twixt ourselves and any thing may be.
For just as soon as it is shed, it straight begins to strive
The air between our eyes and it before itself to drive;
And so we feel the gliding by of all this driven air,
Which, sweeping by our pupils, passes onward as it were.
And hence it comes to pass that we can see how far away
Each thing is; for around our eyes the more alert the play
Of air, the longer drawn the draft that sweeps their pupils through,
So is each object further off that presses on our view.
Know too that this at wondrous speed must happen, so that we
As soon how distant each thing is, as what it is, can see.
Nor must this other point at all occasion thee surprise,
That, while the single likenesses that strike upon our eyes
Are by themselves invisible, the very things can show.
For just thus, when a vigorous wind buffets us with blow

On blow, or cold flows keenly forth, 't is not in human kind
To feel each separate particle of either cold or wind.
We feel their whole result instead; perceiving only thus
That we are smitten, just as if some thing were beating us,
So making us acquainted with a body of its own.
And more than this, whene'er we strike our fingers on a stone,
We touch indeed the part where lie its hues and outer skin,
Yet feel not these when touching it, but rather what within
The skin exists: the hardness of its core is what we feel.

Now come, and gather why beyond a mirror's burnished steel
An image shows; for far inside it surely seems to be.
Now this is of a kind with things which in reality
We see beyond an open door which ample view allows,
Letting us gaze on much outside, though we are in the house.
For this sight in like manner comes from double atmospheres.
For first a nearer atmosphere inside the posts appears,
Next following the folding doors stand back to left and right,
And then an atmosphere beyond, another, outer light,
Sweeps on our eyes, and real things outside are brought to sight.
So when the mirror's likeness by itself has first been shed,
Whilst this to sight is coming, all the atmosphere outspread
Between it and our eyes it drives and pushes in advance,
Enabling us thereby to feel this all, before our glance

Takes in the mirror: but, as soon as this too we discern,
Forthwith a likeness borne from us, arriving in its turn
Upon the steel reflected thence towards our eyes once more
Comes back, and drives and rolls along another air before
Itself, and makes us see this ere we see itself, and thus
The likeness seems withdrawn beyond the steel afar from us.
Wherefore I must repeat this ought to cause us no surprise,
That there, beyond the steel's smooth face, these likenesses arise:
A double atmosphere the key to either fact supplies.
Now why those portions of our limbs, which in ourselves we know
Are right, will aye as if they were the left in mirrors show,
Is thus. When first the likeness comes and strikes the mirror's plane,
It is not scatheless twisted round, but struck straight back again;
In just such wise as if a man with all his might applied
A plaster mask to post or beam, before it was well dried,
And this the while a profile straight could keep and features show
Just as before, but turned aback and inside outward so.
For thus 't would happen that the eye, which was the right before,
Would change to left, and likewise left to right be shifted o'er.
A likeness too from mirror is to mirror handed on
Occasionally, so that five or six are made from one:
And objects, in the inner parts of houses stowed away,

Though in remote recesses round a dozen corners, may
Through many a crooked passage be at last compelled to come
By many mirrors till they seem inside our very room:
So perfectly are likenesses from steel to steel conveyed.
But what was left when first thrown off, right by the next is made,
Then back again is changed, and turns to what was first portrayed.

And furthermore the little sides of mirrors which possess
A curvature of surface, like our own side more or less,
Likenesses where the right to our right corresponds reveal;
Either because the image is transferred from steel to steel
And so, thrown doubly back, takes flight to usward; or because
On coming to the steel it wheels completely round, the laws
Of curving mirrors teaching it to face about to us.

Once more thou'dst think that semblances with simultaneous
Steps with our own set down their feet, and mocked our every act,
Because from whatsoever part of mirrors thou in fact
Withdraw thyself, no semblance thence can further issued be;
Since Nature forces all things back at angles equally
Acute from objects to rebound as those at which they strike.

Again our eyes shun shining things and see them with dislike.

The sun will blind thee if thereon persistently thou bend

Thy gaze; because his strength is great, and semblances descend
Through the pure ether heavily from his stupendous height,
And smite the eyes, and disarrange the mechanism of sight.
Moreover any brightness which is keen is apt to sear
The eyeballs, since a host of seeds of fire thereto adhere,
Which force their way into the eyes, and there engender pain.
Again whatever jaundiced folk behold acquires the stain
Of yellowness, since many seeds with yellow colourings
Flow from their bodies forth, and meet the semblances of things,
And there are many other which, remaining in the eyes,
By contact paint all things with their disease's sallow dyes.

Now we, ourselves in darkness, things which in the light appear
Can see, because the blackness of the nearer atmosphere
First entering takes seisin of our open orbs of sight;
Thereafter follows instantly the brilliant air and white,
And rinses them, as 't were, afresh, and brushes clean away
The dark shades of that former air; because the air of day
Is subtler, and more mighty, and more quick to energize.
As soon then as this occupies the pathway to our eyes,
And opens up what hitherto by the black air has been
Blockaded, straightway semblances of objects follow in
That dwell in light, and torpid sight arouse, until we see.
Yet this in darkness out of light we on the contrary
Can not achieve, since from behind the darker, grosser, air

Now presses forward, filling up each open thoroughfare,
And blocking every passage to the eyes, lest semblances
Of any thing should fall thereon, and stir their energies.
So, when we gaze on square-built towers of cities from afar,
The reason why they seem to us so often circular
Is that all angles seen from so far off obtuse are made,
Or rather are not seen at all, because their force is frayed;
Their blows have ne'er possessed the strength our vision to attain:
Since, while their semblances are borne across the airy main,
Its waves by constant buffettings blunt efforts made in vain.
So when these angles all have scaped our senses by their scathe,
It follows that stone buildings get rubbed down as at a lathe,
Yet not to be so rounded as the things we truly see
Close to us, but like sketches just a little shadowy.

Our shadows too appear to move when we are in the sun,
To dog our steps, to mimic all our movements one by one,
If thou canst deem it credible that air unlighted can
Step forward, following the acts and gestures of a man.
For if it be not air deprived of light, then naught at all
Can that be which in speaking we 'a shadow' use to call:
And fairly, since the ground must lose the sunshine, wheresoe'er
In regular progression 'twixt the twain we interfere
In walking; whilst each spot we quit is filled with it anew:

And thus what was the shadow of our body seems to view
Unflaggingly to follow us and in the same straight line.
For evermore with new-born light fresh rays are poured to shine,
And old ones pass away, like wool when dragged across a flame.
So earth is easily despoiled of light, and by the same
Means is refilled, and washes the black shadows from her face.

And yet we not a whit allow that eyesight in this case
Has been deceived: its task it is indeed to see the spot
Where light is, and where shade: but if the light be, or be not,
The same, or if the shadows here unchanged can thither go,
Or whether that be true which I just now have tried to show,
These points beyond a doubt the mind by reason should discern.
What is the nature of a thing the eyes lack means to learn.
Then fasten thou no blame on them when mind has wrought the ill.
The ship in which we journey moves while seeming to stand still:
The one at anchor in the roads we think is going by:
And hills and meadows fast astern to all appearance fly
By which we drive our barque, with sails for wings, before the wind:
The constellations one and all in ether's vaults confined
Look motionless, and yet they all are ever on the move,
They set and rise to traverse o'er again the heaven above

With bodies bright, then seek afresh their yester-mornings grave.
So too the sun and moon would seem a settled place to have
And there to bide; though fact proclaims that aye their course
they keep.
Steep hills too rising far away from out the circling deep,
'Twixt which there lies a wide expanse of waterway whereon
A fleet might ride, look like an isle by seeming joined in one.
When children cease to whirl around themselves, the rooms begin,
And columns too, or so they think, at such a pace to spin
And whirl about, they scarce feel sure that columns, house, and all,
Are not in momentary risk about their ears to fall.
When Nature takes in hand to lift the ruddy beam that thrills
With quivering flame above the crest of yonder eastern hills,
Those hill-tops, over which the sun appears to shed his rays
So closely as, himself on fire, to touch them with his blaze,
Are scarce two thousand arrow-flights away from us, as near
Not seldom as five hundred casts of any common spear;
The while between them and the sun unmeasured levels lie
Of ocean stretching underneath the regions of the sky,
And many thousand countries fill a vast expanse between,
Where sundry peoples dwell, and beasts of many kinds, I ween.
A puddle too scarce deeper than a finger-breadth is broad,
Standing amid the uneven stones of any paved high road,
Affords a prospect underground as far and wide outspread

As yon vast gulf of heaven that yawns forever overhead ;
So that we seem to look straight down, and gaze on clouds and skies,
And bodies held therein, beneath the earth in wondrous wise.
So, if our gallant charger chance with us to get stuck fast
Half-way across a river, and its waters speeding past
We stoop to scan, although our horse stand still, strange forces seem
To drive its body rapidly athwart and up the stream.
And, wheresoe'er we cast our eyes, with simultaneous
Action all objects seem to move and flow along with us.
Once more, although a portico on true right lines be made,
And pillars all alike throughout support its colonnade,
A long one not the less for this, if viewed from either end,
Appears by slow degrees towards a narrow point to tend,
Till roof and floor together meet, and right and left in one
Are mingled, in the vanishing perspective of a cone.
To sailors out in open sea the sun appears to rise
Out of the waves, and in the waves he hides his light and dies,
Since naught save water and the heaven from dawn till dusk they see,
Lest thou believe our senses fail all round too easily.
Folk skill-less in salt water's ways see ships in port, and think
Them damaged, pressing broken poops against its briny brink,

For that part of the oars above the waterline is quite
Straight, and the rudder's upper half stands perfectly upright;
But what beneath the water sinks, so far as is discerned,
Looks broken off, and bent awry, so back and upward turned
And twisted as to seem almost atop the sea to swim.
When winds across the welkin waft their cloudlets in the dim
Hours of the night, the brilliant stars that gem the realms above
Appear across their fleeciness with silent speed to move
On a far other course than that which really they ply.
Again if e'er thou chance to put thy finger 'neath one eye
And press it upward, through some sense each object which we view,
E'en while we gaze on it, instead of one appears as two:
Each lantern then aglow with fire in twofold figure gleams,
Each bit of furniture throughout the house redoubled seems,
And men with double bodies and two faces move around.
Lastly when sleep with drowsiness our limbs has sweetly bound,
And our whole body lies outstretched in absolute repose,
Just at that time in spite of fact, as every body knows,
We to ourselves seem wide awake and active, and we see,
Or think so, daylight and the sun 'mid night's obscurity.
Though cabined in confinement close we seem our clime to change,
And over seas and streams and hills and plains afoot to range,

And, whilst encompassed by the night's dead silence, voices heard
To recognize and answer, though we utter not a word.
And many other wondrous things of this same sort there are,
Which all contribute faith in our true senses to impair,
Though vainly, since the greatest part of these our judgment blind
Through superadded guesses, which are fashioned by the mind;
So that we feel assured we saw what sense has never seen;
For nothing is more ticklish then to draw the line between
Plain facts and doubtful, which the mind tacks on, though all its own.

Again if any body think that nothing can be known,
He knows not that he cannot know; for his contention is
That naught is known: I take no brief against the absurdities
Of one who only opes his mouth to put his foot in it.
Yet, grant such knowledge, I would then one question ask, to wit,
Whence, since the truth in any thing he never yet has seen,
Arose his knowledge what 'to know' and 'not to know' can mean?
And what between true things and false enables common sense
To judge, and what 'twixt certainty and doubt makes difference?
Then wilt thou find that knowledge of the truth was first achieved
By sense, and that the senses can by nothing be deceived:
For that upon our confidence has most of claim in sooth,
Which of itself is strong enough to conquer lies by truth.



Well then what can have greater claim upon our confidence
Than sense? Shall reason, founded on false sense, have competence
To gainsay it, when reason from the senses has its rise?
And, if sense is not truthful, then all reason must be lies.
Say, shall the ears rebuke the eyes for falsehood? Shall the touch
Impugn the hearing, or forsooth the palate's taste avouch
Touch not trustworthy, or the smell or eyesight prove it wrong?
Not thus, I wis, are senses wrought: to each of them belong
Its special gift and force distinct; and thus it needs must be
That what is soft, or cold, or hot, is by one faculty
Perceived, another quite distinct observes how things are dyed
With various tints, and scans whate'er with colour is allied.
Apart the palate's taste exerts its properties; and smell
Is born apart, and sound. And thus 't is quite impossible
That any sense another should convict of falsity.
Nor can a sense's judgment by itself refuted be,
Because we always owe the same amount of trust thereto.
Wherefore at all times what approves itself to sense is true.
And if thy logic lack the skill to tell the reason why
Things, which were square when close at hand, when distant from the eye
Look rounded; still 't is better, if thou know not Nature's laws,
For either figure to allege imaginary cause;

Than to let go thy hold of truths most plain, to do despite
To faith's first principles, to tear away in headstrong might
The taproots of the tree on which thy life and health depend.
For not man's logic only, but his very life, my friend,
Would instantly collapse, unless his trust were free to cling
To sense, and pitfalls to avoid, and every suchlike thing,
That men by instinct flee from, whilst their contraries they seek.
Know then that all the host of words, that certain people speak
Against the senses, all in vain is marshalled and arrayed.
In fine as, if in craftsman's shop his first footrule is made
Amiss, and blunder mars the true right-angles of his square,
And if his level anyway be canted but a hair,
His houses all are falsely built, and aye must slanting be,
Bowed, crookèd, leaning in and out, devoid of symmetry,
So that some parts seem ready to come down, and some in rents
Are falling, all gone wrong through first mistaken measurements,
So any theory of things must needs result in lies
And wrong conclusions, which from false sensations gets its rise.

Now how each other sense its own true matter apprehends
Remains to tell. A smoother path will make our toil amends.
Well, first then every sound and voice is heard, whene'er its din
By bulk of body on the sense has forced a passage in.
For that all voice is bodily we must of need confess,



And sounds likewise, since they have power upon the sense to press.
Besides voice often scrapes the throat, and shouting loud enough
Will make in passing forth abroad the bronchial tubes more rough;
For voice's first-beginnings, truth to tell, in greater crowd
Than wont, through narrows struggling to get out and cry aloud,
Fill the mouth up so full that all its gateway they abrade.
Wherefore 't is clear beyond a doubt that voice and words are made
Of elements possessed of bulk corporeal, and can hurt.
It cannot have escaped thee how, when orators exert
Till night's black shadows from the gleam that ushers dawning day
Their power of ceaseless speaking, somewhat thus is ta'en away
From body, and how much withdrawn from vital nerve and strength;
Specially if the pitch be high throughout their speeches' length.
And so that voice true body has to doubt we may not choose,
Since orators by speaking long some part of body lose.
The roughness too of voice from rough first elements in sooth
Proceeds; its smoothness follows when these primal forms are smooth.
Nor do sound's first-beginnings like in form upon the ear
Strike, when the trumpet brays in bass its deepest loudest blare,
Waking strange lands to echo back its hoarse and hollow sound,

And when pale swans from rushing streams, that leap and swirl around
Mount Helicon, clear plaints uplift in melancholy song.
So when we press these voices through our body all along
Windpipe and larynx, by the mouth abroad to send it straight,
The lissome tongue, that fashions words, gives them articulate
Frame, and the structure of the lips has in their shaping share.
Thence when between its starting point and goal the space of air
Each several voice must traverse is not overlong, each word
Can be distinctly recognised, articulately heard,
Because it keeps its structure and its shape entirely whole.
But if there intervene too long a distance, ere its goal
Be reached, the words confusèd grow in such a stretch of air,
The voice becomes disordered in its breezy thoroughfare;
So that it comes to pass that we may hear a sound, but not
Discern the meaning of the words it once expressed a jot,
So muddled and distorted is the murmur which one hears.
Again a single word will oft arouse the drowsy ears
Of all a crowd, if uttered in the crier's ringing tone.
Therefore a voice by scattering may many out of one
Be made, since all the several ears of many it can reach,
Sealing the structure of the word with clearest sound on each.
But any parts of voice, which on our hearing strike not, fare
Beyond, and come to naught in waste, dispersed amid the air:



Though some of them, colliding with hard substance, from the shock
Return us noise with likenesses of voices, sense to mock.
Which if thou once hast throughly learned, thou mayest well supply
To thine own self and other folk the real reason why
In lonely spots a rock set words in proper order sends
Us back when we 'mid wooded hills make search for straggling friends,
Using our voices' highest pitch the wanderers to recall.
Spots I have seen which can return six, aye or seven in all,
For one sound given forth, so fast the words from hill to hill
Are thrown and driven back again, though always homing still.
These are the spots the neighbours all pretend that nymphs possess,
And wild goat-footed satyrs; and the fauns, as they profess,
Abide there, whose night-flitting noise and laughter, and their play
Not seldom break the silence of the darkness, while, they say,
The sound of cittern-strings is heard and music sadly sweet,
Such as the flute will breathe when by a player's fingers beat.
The husbandmen for miles around oft listen when, 't is said,
Pan shakes the pine-leaf thatch above his hardly human head,
And runs his arching lip the row of gaping reeds along,

For fear his pipe should lose the trick of shedding woodland song.
And other marvels like to these, and miracles, they tell,
Lest they themselves should be supposed in lonely spots to dwell
Where no gods come. So these strange things they vaunt to cheat their fears,
Or else led on by other aims; for truly it appears
Mankind is always overfond of tickling itching ears.

As for the rest, 't is not a point to call for wonder, why
From places, where the plainest things are hidden from the eye,
Voices should make an easy way, and on our hearing fall.
For converse through shut doors, we know, is not unusual;
Because assuredly a voice can pass uninjured through
The winding apertures of things, which figures cannot do.
Since these are torn to shreds unless the openings are straight,
As is the case with glass, through which all sights can penetrate.

And furthermore a voice can be on every side dispersed,
Because fresh voices all the while are gotten, when the first
Arising has in many parts been sundered, as a spark
Of fire a host of kindred fires engenders in the dark.
So places are filled full of sounds, which, though withdrawn from sight,
Are stirring fast and simmering with echoes infinite.
But likenesses must all of them in one straight course proceed



When they are once cast off, and thus no man can see indeed
Beyond enclosures, though he can hear sounds from th' other side.
Although the very sounds, which through our houses' walls can ride,
Thereby are blunted and confused when on our hearing poured,
So that we seem to hear a noise but catch no single word.

And now the palate and the tongue, wherewith we recognize
Tastes, no severer reasoning demand, nor more surprise.
In the first place our mouth becomes acquaint with flavour, when
We press it out in chewing food, just as a sponge, we ken,
Is full of water when our hand begins to squeeze it dry.
Next all that we thus press thereout is spread abroad thereby
Over the hollow palate and the porous supple tongue.
Then, to the exuding juices when smooth elements belong
Exclusively, their pleasant touch with sweet embrace enfolds
The moist salivous parts wherein the tongue her quarters holds ;
While if they rise in lumps they prick and irritate the sense
In such degrees as roughness in each case makes difference.
Finally taste's enjoyment to the palate's end will last,
But when the food has downward through the gullet's narrows passed
There is no further pleasure while through all the limbs 't is spread ;
Nor does it matter with what sort of food the frame is fed,

If what we take we can digest and to our limbs convey,
And, fairly moist, our stomach keeps the tenour of its way.
Now how to this thing one same food is sweet and nourishing
And not to that, I'll tell; and why things which are sour and sting
With one, in oversweetness seem to bathe another's sense;
And how herein can come so great and wide a difference,
That what to one is wholesome food another's poison is;
So that a snake, they say, exists which straightway perishes
Touched by man's spittle, gnawing its own flesh until it dies.
Green hellebore again for us the strongest qualities
Of poison has, but goats and quails grow fat and thrive thereon.
And now, to understand the way in which all this is done,
Thou must remember first of all our former argument,
To wit, how seeds contained in things are variously blent.
Moreover all created things, that live and thrive by food,
As they are quite dissimilar outside, and all endued
After their kind with one contour of limbs which none escapes,
Are likewise made of separate seeds which vary in their shapes.
Then, since the seeds are different, it follows that the things
In intervals and entrance-ways—which we call openings—
Must differ as to limbs and mouth and palate one and all:
And thus some seeds must larger be, and some of them more small,
And some of them triangular, and others of them square:



And many round, and some in lines diverse rhomboidal are.
For, as the ratio of shape and motion justifies,
Seeds in their openings must be of many forms likewise
And change of texture equal change of passages implies.
So when one body sweet to some, to others bitter, is,
Where it is sweet 't is manifest its smoothest substances
Enter the palate's hollows so that they are felt alone;
On the other hand, where this same thing a bitter taste has shown,
'Tis that its rough and crooked parts have seized upon the jaws.
Now from these facts 't is easy to discern each case's laws,
For when a fever has sprung up from bile's too quick increase,
Or any other cause begets the forces of disease,
Then the whole body is disturbed, and all its fair array
Of first-beginnings from their right arrangement turned away,
So that the bodies, which to sense were suitable before,
Now suit it not, but others quite reverse befit it more,
Which penetrate, and so a sense of bitterness produce.
And both these qualities exist combined in honey's juice,
A fact which we have many times ere now to thee explained.

Now come, and I will show thee how the nostrils are attained
By scent's approach. And, to begin, there many things must be
From which a flood of many smells is rolled incessantly;

Which, one must think, are spread and poured and scattered all around;
But various smells with various things that live are better found
To suit through difference of form. Thus through the wastes of air
Bees by the scent of honey far afield are led to fare,
And vultures by the odour of dead bodies: thus the force
Of hounds' earth-pointed nostrils track the cloven-footed course
Of boar or stag: thus snow-white geese th' approach of man can smell
From far, and saved in days of old our Roman citadel.
Thus gifts peculiar of scent, to each allotted, lead
Each to its proper food, and teach from poison fell the need
Of shrinking: thus the families of brutes preserve their breed.
Well then, these smells of many sorts which to our noses come
Vary in strength, some further can extend than other some.
But there is not a scent among them all, its way that wings
As far as sound or voices, not to speak about the things
Which smite the pupils of our eyes and stimulate their sight:
Because they move more slowly, and more quickly die outright,
The sooner scattered by degrees amid the yielding air,
That first from out its source's womb it scarce had force to fare;—
Because that from the inmost parts of objects all smell flows
Is patent, since the things themselves will more affect the nose



If crushed, or powdered, or reduced to ashes in the fire.—
And thus we know that larger first-beginnings must conspire
To fashion scent than sound, because the former has no power
To pierce stone walls, where voice and sound are carried every hour.
For this cause too, as thou canst see, less easy 't is to trace
In what precise locality the thing we smell has place;
Since, while it dawdles through the air, its blows grow colder thence,
Nor are its messages of things still warm when reaching sense.
Hounds often are at fault, and quest for marks, in consequence.

Now these distinctive characters to smells and flavourings
Are not peculiar; for shapes and colours too of things
Not all in similar degrees are suitable to all:
But some upon the sight of some with more of sharpness fall.
Thus, when the cock 'gins clap his wings to drive the night away,
And summons with his shrilly crow the dawning of the day,
The ravening lions powerless are to look upon the sight
Or stand before him, but at once bethink themselves of flight;
And that because within the form of chanticleer there lie
Some certain seeds which, when cast forth upon the lion's eye,
Dig through the pupil, causing thus such agony of pain
That e'en the boldest beasts can ne'er against it firm remain.

And yet these do the human eye no sort of injury,
Either because they strike it not, or, striking, passage free
Find to go through and out of it, so that by longer stay
They may not damage any part of sight in any way.

Now list, and learn what matters move intelligence, and find
In a few words whence those things rise which come into the mind.
And first of all I tell thee this, that semblances abound
Of many kinds, in many ways that flutter all around,
Slight things that easily can take of one another hold,
Meeting in air, like spiders' webs or leaf of beaten gold.
Nay and these semblances are in their texture slenderer
By far than those which seize the eyes and sight's sensation stir,
Since through the body's porous parts they pierce, and move the thin
Consistency of mind, and stir to life the sense within.
Thus we can see the Centaurs, thus can Scylla's limbs behold,
And Cerberus' three mastiff-heads, and forms of friends of old,
Whose bones have rested since their death in earth's embraces cold.
For semblances of every kind are carried here and there;
Some of them of spontaneous begetting in the air,
And some the likenesses thrown off from many sorts of things,
Or hybrids made from shapes of these by strange forgatherings.

For certainly no image of a Centaur has been wrought
From life; since no such living thing to birth was ever brought:
But when the image of a man and horse by chance have met,
They easily unite at once, as I but now have set
Before thee, through their subtilty and slenderness of thread;
So other forms of this same sort on this same plan are made.
And then as these are borne about with great facility
Through their exceeding lightness, as before I shewed to thee,
Each single subtlest image by one blow on mind may tell
With ease, for mind is slender too and wondrous moveable.

Now, that this happens as I say, thou easily canst find.
So far as they resemble one another, what the mind
And what the eyes behold must on like systems fashioned be.
Therefore, as I long since explained that when I chance to see
A lion, 't is by likenesses which strike upon my eyes,
We may be sure that mind is set to work in just such wise
By likenesses of lions and of other things it sees,
Just like the eyes, save that it sees far slighter substances.
And for no other cause, when sleep lays out the weary frame,
Does mind still wake, except that it is smitten by the same
Thin semblances, as smite it when the limbs are waking too;
So that we seem beyond a doubt the form of friends to view,
Whom life has left, and death and earth's embraces now enthrall.

Now Nature causes this to come to pass, because then all
The body's senses through the limbs are hindered and at rest,
And cannot, by presenting truth, bid falsehood stand confessed:
Moreover memory is weak and overcome by sleep,
Nor enters protest that the grave and death possession keep
Of old of him whom mind perceives still living, as she deems.
Again it should no marvel be that any likeness seems
To move, or sway in proper time its arms or limbs around;
For objects seen in sleep to do this very thing are found.
Because when one has perished, and a second in a new
Posture is born, the former seems in motion to our view
For thou must know that this occurs with great rapidity;
So quickly does an image move, so vast a quantity
Of things there is, so huge a store of particles beside,
At any given moment, whence all waste may be supplied.

And many questions here arise, and many matters need
Our clearing up, if we would make our subject plain indeed.
And first the query rises, why, whate'er desire may burn
Inside us, thitherward our mind its thoughts will straightway turn.
Is it that semblances exist observant of our will?
And images, while we but wish, come forth our minds to fill,
Whether our heart in fact be set on land, or sky, or sea?
Does Nature human gatherings, processions, poetry,

Pitched battles, all, find ready-made and furnish to command?
And that, when in the selfsame spot a neighbour close at hand
Is pondering within his mind things quite dissimilar?
And what again, when we perceive, whilst we in slumber are,
Shadows advance with measured tread, and lissom members sway,
Whose supple arms move easily now this now the other way,
Whose docile feet the while repeat their steps before our sight?
Why errant likenesses good sooth of learning must be quite
Brimful, to play their parts so well amid the murk of night!
Or shall we call this nearer truth? As in such briefest space
Of time, while sense observes it, when one word can scarce win place.
Times without end lie hidden, which sound reason knows are there;
Just so it is that Nature may at any time prepare
Her semblances in readiness for showing any where,
So quickly do they move about, so vast their numbers are.
But, owing to their slenderness, the mind may not perceive
Any but those it strives to see: the rest, as I believe,
Are wasted, save when mind itself is ready to conceive.
Nay and the mind prepares itself in hopes that it will see
What follows in each case; and this occurs accordingly.
For see'st thou not how, when the eyes are set to work to view
Minute things, they exert themselves and make them ready too?

Nor could we keenly see at all without this kind of strain.
And yet thou mayst remark the while in objects, howso plain
They show, unless thou think thereon, 't would make no difference
Were they not there at all but far beyond thy range of sense.
What wonder then if mind do pass all other objects by
Save those on which it concentrates its fullest energy?
And then we make from little signs conjectures vast and wide,
And plunge ourselves in error through our own deceitful pride.
Sometimes too it will come to pass that shapes of one same kind
Are not successively supplied, and all at once we find
A man before us where just now a woman filled the space,
Or forms of other age and mien the earlier displace;
But sleep and sleep's forgetfulness astonishment efface:

And here thou shouldst with all thy might desire this fault to shun,
This error to avoid, in dread of such a fatal one;
Of fancying the brilliant lights of eyes to have been made
For us to gaze abroad with them; or that for length of tread,
When we go forth to walk, the bands of sinews closely lace
The extremities of thighs and shins, with feet to form their base;
Or that the fore-arm to the stout strong upper is applied
So well, and ministering hands are given on either side,

That we might have the power to do whate'er we need to live.
And other explanations of the sort, which people give,
All by distorted logic put the cart before the horse:
Since nothing in the body has been born that we it's force
Might use, but whatsoe'er is born brings its own use to light.
Neither before our eyes were made was such a power as sight;
Nor was there speech or words before the shaping of our tongue.
Rather, I ween, the tongue had been in being very long
Ere speech arose; and ears were formed no little while before
Sound first was heard; and all our parts, if we would tell them o'er,
Existed, as I deem, before the use of them was known.
So not for their employment's sake it was that they have grown.
Quite otherwise desire to fight and battle, man with man,
To mangle flesh, and foul the limbs with streaming gore, began
Long ere the first bright spear of brass flew hurtling through the air:
And Nature by herself of wounds compelled man to beware
Before his left hand's skill upheld the shelter of a shield.
So too the body, tired with toil, to quiet sleep to yield
Was an old way, ere quilt or sheet on any bed was laid;
And folk would quench their thirst before a cup was ever made.
Therefore these things, we may believe, discovered from the use
Of daily life, have been found out their purpose to produce.
But it is quite the other way with things which primally

Were of themselves, and afterwards showed their utility:
Foremost of which we reckon that our limbs and senses be.
Wherefore I once again assert, it cannot be believed
That these at first for sake of their employment were conceived.

Nor should we feel astonishment that everything endued
With life by its own nature's law is forced to seek for food.
For I have taught thee heretofore that atoms ebb and flow
In many ways from many things; and this must most be so
With living creatures. For, as these are worn by exercise,
And many an atom from their frame, expelled in sweating, flies,
And many through the mouth are breathed when wearily they pant,
Their bodies' density grows less, and all their nature, scant
Of strength, is undermined; a state which leads to suffering.
So food is taken to prop up their shaky limbs, and bring
Their vigour back, and hunger, spread through every joint and vein,
To stop by satisfaction, and relieve them of their pain.
Its moisture also wanders here and there to every spot
That wants it; many bodies too, like heavy lumps and hot,
Which caused a sense of burning in the stomach, put to rout
Scatter at coming of the drops, and like a fire go out:
So that the fevered limbs no more by scorching drought are tried.

Thus thou canst see how panting thirst is washed, as by a tide,
Out of our body, how the lust of hunger satisfied.

Now how it happens that we can step forward when we please,
And have the gift to move our limbs in all varieties
Of action, and what motive power our body's bulky weight
Sets forward, I will tell: do thou attend to what I state.
Well then I say that semblances of walking come before
Our mind at first, and smite it, as we have remarked of yore.
These rouse the will; for never man has any deed begun,
Unless the will has first discerned the thing it wishes done:—
And what it thus discerns must be in very image by:—
Next when the mind bestirs itself with such activity
As thus to will to step and walk, it straightway smites the force
Of soul, through all the body's limbs and joints that holds its course;
And this is done, because the twain are closely blent, with ease:
And then the soul the body strikes; and so by slow degrees
The whole huge bulk is pushed along, and forward 'gins to fare.
Besides the frame grows looser then in texture, and the air,—
As ought to be the case with what aye moves so easily,—
Reaches the open pores, and through in ample quantity
Passes, and thence to each of its minutest parts is spread.
Thus by two powers on either hand the work is perfected,

So that the body like a ship by sails and wind is sped.
Nor is there room for wonderment, in what is said above
About our bodies and the air, how such small atoms move
So large a bulk, and masters of our whole huge burden prove.
Because the wind, though slightly framed and subtile, ever thus
Pushes and drives a mighty ship with mighty impetus;
And one hand governs it, whate'er the speed at which it sails,
One helm to turn it here or there to any point avails.
And so machinery by means of pulleys, wheels, and stays,
Can many things of heavy weight with little effort raise.

Now by what means the sleep we love can through our limbs distill
The dews of rest, and free us from the mental cares that fill
Our breast, in verses rather sweet than lengthy I will tell;
Just as the dying swan's low notes in melody excel
Cranes' noisy cries that earthward down from southern cloudlets swell.
Do thou provide an ear exact, a mind both wise and shrewd,
Lest thou deny that what I say in any manner could
Occur, and while thy heart rejects the truth, shouldst backward turn,
Where all the fault is thine, and thou unable to discern.
So, to begin, sleep comes to us when through the joints outspread



All the soul's forces are dispersed, and some, cast out, have fled
Abroad, and some together massed their inmost dwelling keep.
For then, and not till then, our limbs grow loose and limp in sleep.
Because our feeling-power without a doubt by means of soul
Exists in us, and when this lies enthralled in sleep's control
We may be sure the soul is thus much put about thereby
And driven abroad; not all of it; for then the frame would lie
Bathed in the everlasting cold of death: for if no more
Some little spark of living soul were kept in hidden store
Inside the frame, as fire lies hid in heaps of ashes gray,
From whence could sense rekindled be, through all the limbs to play
Afresh, as flame from smothered fire will break its sudden way.
But by what steps this novel state is brought about, and whence
The soul can be deranged, the frame relaxed by loss of sense,
I will explain: be thine the care I waste not words on wind.
In the first place the body on its outer edge or rind
Must needs, as touching open air in neighbourhood complete,
Thereby be buffeted, and with repeated blows be beat.
And therefore almost everything that lives is covered well
Outside with hide, or callous skin, or bark, or even shell:
But in the case of breathing things the same air knocks about

Their inner portions also, while they breathe it in and out.
So seeing that the frame is thus through all its length on each
Side beaten, and through apertures minute the blows can reach
The body's primal elements and parts of first import,
Our members fall by slow degrees to ruin in a sort;
Till all the true relations of the mind and frame are quite
Disorganized, until thereby part of the soul outright
Is clean cast out, and part retires within and hides away;
Parts also, scattered through the joints, no kind of effort may
So far unite that they can join in movements mutual,
For Nature's self from meeting or approach debars them all.
Therefore does sense withdraw, when thus motion is changed throughout;
And when the joints miss, as it were, their stay erewhile so stout,
The frame turns feeble suddenly, the limbs all lose their strength,
The arms drop down, the eyelids droop, nay oft, though stretched at length
Folk lie abed, their hams give way, no longer muscular.
Once more sleep follows eating, for just what the workings are
Of air, just such does food produce whilst it is spread around
To all the veins: and thou wilt find that sleep more deep and sound
By far, which thou shalt take when full or tired, as in that case



More bodies, bruised by stress of work, are driven out of place:
And for this very reason then thy soul in part retires
Deeper within, and more of it, cast out abroad, expires,
And in thy joints 't is sundered more, and further kept apart.

And commonly whate'er pursuits a man has most at heart,
In whatsoever matter we have much been occupied,
So that therein the mind has by unwonted strain been tried,
In that same track we still appear in slumber to abide.
Lawyers keep pleading causes, or adjusting covenants;
Your generals are fighting, or are bidding troops advance:
Sailors are waging battles of long standing with the wind;
And we are on this work intent, and ever strive to find
Things' Nature, and, when found, in Rome's own home-tongue to unfold.
And so in slumber other acts and occupations hold,
Or seem to hold, possession of man's mind to no intent;
And when a man for many days without a pause has spent
Unintermitting pains on sports, we generally see,
Though he has ceased to grasp them with his senses bodily,
That in the mind are paths no less remaining open still
Whereby their semblances can come the sleeper's brain to fill.
Thus these same semblances before our eyes for many days
Present themselves, till, e'en when we are wide awake, we gaze

In seeming upon folk who dance and supple members sway,
Or hearken to the speaking strings, or catch the flowing lay
Of cittern with our ears, and all the well-known throng inspect
Which fills the theatre, with tints of varied brilliance decked.
Of such importance is it where our zeal or pleasure is
Concentred, and on what we most have used our energies,
Nor only in the human, but in every living, kind.
Thus wilt thou see strong horses, when their limbs they have reclined,
Sweating in sleep, and breathing hard, as if still bent to use
Their utmost powers to win the race, or, when the barriers loose
Are thrown, they would at once * * *
Oft likewise, although lapped in soft repose, a huntsman's hounds
All of a sudden toss their legs about, and utter sounds,
And with their nostrils snuff the air repeatedly, as though
They just had found, and held the track of, some wild sylvan foe;
And waking up at once give chase to fancied likenesses
Of boar or stag, which in full flight imagination sees;
Till the mistake is shaken off, and sense resumes her reign.
So little dogs of gentler kind, that aye indoors remain,
Will shake their bodies suddenly, and jump up from the floor,
As if they saw a face and form they had not known before.
And, as each sort of animal is born of rougher breed,

So will its sleeping acts be found more violent of need.
Birds too of every tribe will take at once to hurried flight
And with their wings disturb the groves of gods at dead of night,
If cruel hawks, or other birds that prey on them, have been
Amidst their gentle slumber in the act of swooping seen.
Once more, the minds of men, when they pursue some mighty aim
By mighty effort, e'en in sleep oft carry on the same.
Kings capture towns, are ta'en themselves, join battle, raise the cry
Of sudden fear, as though the hired assassin's knife were nigh.
And many struggle fiercely, ay and groans of pain emit,
And, just as if by panther's teeth or savage lion's bit,
Utter so loud a cry that all the place is filled with it.
Many will talk in sleep of things of utmost consequence,
And often have been guilty found on their own evidence.
Some dream that they are dead, but more fall headlong from the height
Of some steep mountain bodily, and terrified with fright
Awake with body so distraught and mind so little sane
Through passion, that they find it hard to be themselves again.
So thirsty folk will sit them down beside a spring or stream
Of pleasant look, and drink nigh all its water in their dream.
So too when ripening manhood stirs new fancies in the brain,

And vigour never known before throbs in each pulsing vein,
The facts of Nature clearly still the same conclusion prove;
For youth, when day's delights are done, in slumber dreams of love.

This is the only thing whereof the more that is possessed
More hot with fell desire for more burns the unhappy breast:
For food and drink within the frame are taken, and as these
After a while must needs fill up not boundless vacancies,
The lust of bread and water thus with ease is satisfied.
But in fair form and colouring of person naught beside
Mere unsubstantial shadows is it given to men to find,
Mere wretched little shreds of hope oft scattered by the wind;
For just as when a man asleep and thirsty drink desires,
And water is not there to quench his frame's internal fires,
He seeks with labour all in vain the draughts that do but seem,
And still is thirsty whilst he quaffs amidst the running stream:
So Venus lovers loves to mock with semblances of love,
And tantalize with sights that aye unsatisfying prove.
Man thus moreover brings his strength in useless toil to wreck,
And all the better part of life spends at another's beck;
Meanwhile his fortune slips away on wares of Babylon;
Duties are scanted; good repute ails, totters, and is gone.



Her feet with slippers soft and gay from Sicyon are seen
Bedecked, and massive emeralds with clearest lights of green
Are set for her in gold, her robe of sea-green tissue too
Is frayed with constant use, and sweat destroys its tender hue.
His sire's well-gotten wealth in caps and headbands disappears,
Or cloaks sometimes of Alidan or Ceän mercers' wares.
Banquets with dainty napery and choicest viands, play,
Wine in profusion, unguents, crowns of roses, garlands gay,
In vain are furnished, when from out this well-head of sweet things
Some bitterness still rises up, and midst the blossoms stings:
Either when conscience-struck the mind becomes remorseful, loth
To ruin thus its fairest years in lechery and sloth;
Or when some word let fall by her has left a germ of doubt
Fixed in the hungry heart, that thrives like fire and goes not out;
Or when she seems to stare around too much, and look the while
On some one else, and on her face shows traces of a smile.
Now all these ills in lasting love though crowned with full success
Are found; but there are miseries and griefs so numberless
In hapless helpless love, that e'en a man with blindfold eyes
Could grasp them: so that watchfulness in season is more wise,
And from the very first of love's allurements to beware.
For to escape by proper heed from falling in the snare
Is not so hard a task as, when once captured, to get free

By breaking through the sturdy bonds of Venus' witchery.
Yet, when entangled and enthralled, 't is in thine option quite
To scape all harm, unless thou choose to stand in thine own light,
By passing over from the first all blemishes of mind
Or body in the object of thy choice, which others find.
For this is what men often do, when blinded by desire,
Assigning to their ladyloves the gifts they most require.
And thus we see that men will still in highest honour hold,
And favour, women plain or marred in manners manifold.
Nay one will oft another quiz, and urge him to appease
Venus at once, because his love is nothing save disease:
And yet, poor wretch, his own mishap, though worse, he never sees.
The black is a *brunette;* the foul and filthy *dégagée;*
The tiny pigmy is a Grace, and brims with wit, they say;
The over-tall is striking and in dignity excels;
The cat-eyed is a Pallas; skin and bones they term gazelles;
One stutters, cannot talk, she lisps; the dumb is so discreet;
The restless hatefull chatterbox a lantern to our feet;
One is *mignonne gracieuse et svelte*, who scarce can live for want
Of flesh; and one half dead with cough is simply *ravissante;*
But Ceres' self from Bacchus fresh the stout big-breasted is;
The snub-nosed is a Satyress; the blubber-lipped a kiss:
'T would tire thee out, should I attempt to tell the rest of this.
But be thy mistress, if thou wilt, endowed with every grace



Of feature, and let Venus shower her gifts on limbs and face:
Still there are other women: still without her we, I trow,
Have lived before; nay, still she does the very things, we know,
The hideous do, and fumigates with loathsome scents, alack
Poor creature, till her maids run off to grin behind her back!
Yet, when shut out, with wreaths and flowers her lover bathed in tears
Covers her threshold, precious oil of marjoram he smears
Over her haughty door-posts, and with kisses tires her door:
Though if one whiff, when he, at last admitted, comes before
Her presence, met him, he would seek excuses to depart,
Dropping his meditated plaint prepared with farfetched art,
And stand a self-convicted fool, for having been so blind
As with more charms to gift her than belong to human kind.
Nor are our beauties unaware of this; but each one tries
These arts behind the scenes of life to cover from the eyes
Of those she would in chains of love hold bounden to her tight:
In vain; for thou canst from her mind draw forth into the light
All this; and search into her smiles, and scan her every nook.
But, if she be good-tempered and not tiresome, overlook
Her faults, as blots that always mar our nature's fairest book.
And sometimes too, without the gifts of gods and Venus' darts,
A little woman wins man's love, though of inferior parts:
For woman now and then herself accomplishes the feat

By her obliging manners and a person trim and neat,
And easily accustoms one to pass one's life with her.
Moreover habit teaches love to grow the kindlier:
For aught that's struck, though lightly, yet repeatedly by blows,
Weakened in course of time gives way, as everybody knows.
For seest thou not how even drops of rain or gathered dew,
Falling on stone, at last will wear the stone entirely through?



BOOK V.

HOW THINGS CAME TO BE.





BOOK V.

WHERE is the spirit strong enough to frame the song to shrine
In form not all unworthy revelations so divine?
Who has the skill in words to tell the fulness of the praise,
Just as it should be told, of him who left to later days
Such gifts, the fruit and guerdon of his own farseeing mind?
None such, I wis, will e'er be found, or not of mortal kind.
For if, as his discoveries' acknowledged merits need.
Truth may be told, illustrious friend, he was a god indeed,
A very god, who first found out those theories of life,
Which now are called Philosophy, who out of so much strife,
And storm, and such thick darkness, had the skill aright to steer
The barque of human life to calm so smooth and light so clear.
Just look at the inventions of the other gods of old,
And put them side by side with his. Why! Ceres, we are told
Discovered corn; Liber the grape's vine-nurtured juices found!
Yet without these things folk may live and flourish safe and sound:
As is the case with some tribes now, as travellers will swear.
But that a man whose heart is foul should live well anywhere,
Can not be. Therefore he to us more justly counts a god

Whose happy revelations, through vast countries spread abroad,
Have solaced human suffering, and made man's life more sweet.
But if perchance thou deem the feats of Hercules compete
With his, thou wilt from truth's safe road be further borne astray.
Did the Nemeän lion's mouth gape ne'er so wide to-day,
How could it damage us? or how the rough Arcadian boar?
What could the Cretan bull do? how the pest of Lerne's shore,
The famous hydra, fenced about with poisoned snakes, avail?
Or triple-chested Geryon's might threefold? Should we quail,
Though birds of prey were now to haunt Stymphalus' swamps of reed?
How could the tameless horses of the Thracian Diomede,
Though breathing fire along the slopes of Biston Ismarus,
Or how that serpent, angry-eyed and cruel, injure us,
Who guards the golden apples of the far Hesperides,
Those gleaming apples, coiling his vast body round the tree's
Rough bole, beside th' Atlantic coast where dreadful billows rear
Their crests, which none of us, nor yet the natives, dare go near?
The other monsters too like those which erst Alcides slew;
Had they not been subdued, what harm, though living, could they do?
None, as I think. Earth even now with savage creatures swarms
Superabundantly; 't is filled with horrors and alarms

In leafy groves, 'mid giant hills, in depths of woodland, still ;
But for the most part we can shun these places if we will.
Whereas, unless the breast be cleansed, how many a cause of fight
And risk must work its way in us, though in our own despite !
How then is the uneasy man by souring avarice
And weary care asunder torn ! What terrors thence arise !
And what of filthiness, and pride, and waywardness ? Do they
Not slaughter men ? Do none through sloth and luxury decay ?
Then, if a man has vanquished all of these, and in the might
Of words, not weapons, driven them from the soul, is it not right
That such an one of winning to the ranks of deity
Should be held worthy ? nor the less that well and worthily
About the deathless gods themselves of wont he often spake,
And Nature's secrets, long kept close, by language open brake ?

Now while in this man's footprints in thus teaching thee I tread,
Following all his reasonings ; how everything is made,
And on what terms ; and how in these all things must aye abide,
Nor set the stedfast laws of past eternity aside ;—
Wherein it has been first of all made manifest that mind
Only subsists when with a frame of body born combined,
And will not for a lengthened space of time in safety keep ;

But that false likenesses are wont to cheat us in our sleep,
When to ourselves we seem to see some friend of life bereft ;—
The process of my argument now leads to what is left.
For I must furnish proof that all this world that we espy
Had once a time of birth, and has a body which must die ;
And show what methods gathered seeds of matter into one,
To give the start to earth, and sky, and sea, and stars, and sun,
And the round moon ; and what live things have out of mother Earth
Been brought to being, ay and what have never thence had birth ;
And in what way among themselves at first the race of man
The use of various sounds of speech in naming things began ;
And by what steps the fear of gods has slowly wormed its way
Into men's bosoms, till throughout the whole wide world to-day
They worship temples, altars, groves, lakes, images of clay.

Moreover I will teach thee by what force the moon and sun
By Nature are controlled, and how she steers the course they run ;
Lest haply we suppose that these, betwixt the earth and sky,
Illumine of their own accord their endless tracks on high
Out of good will to growth of crops and health of living things ;
Or that some system of the gods avails to pull their strings.

For they who have been truly taught that gods a life must live
Exempt from care, if wonder still they feel how things contrive
To get along, and specially such as the human eye



Can overhead in the vast realms of atmosphere descry,
Are back to the old prison-house of superstition led,
And get themselves cross masters, whom in miserable dread
They count almighty, knowing not at all what things can be
And what can not, and on what plan a finite faculty
Has been assigned to each, a goal fixed firmly, finally.

But now, lest further promises cause only more delays,
As thy first step, on heaven and earth and ocean fix thy gaze.
These forms of three-fold nature, these three bodies, Memmius,
Three fabrics so unlike in look, in work so marvellous,
One day shall give to ruin, when the mass, through countless years
Upheld, is shattered, and the world's whole framework disappears.
Nor am I unaware how strange a thing must seem and new
To thine intelligence this doom, which some day will undo
The universe,—how hard for me to prove by argument;
As always happens when before the hearing we present
Facts yet uncommon, which we may not manifest to sight;
Nor put into the hands, whereby man's heart to reach aright,
And reason's seat, is aye for trust the nearest, safest way
Nevertheless speak out I will. Plain fact of what I say
Perhaps will give assurance; nay, it may be thou shalt see
Great earthquakes rise, and all things dashed to pieces speedily:
But this may Fortune at the wheel ward off from thee and me.

May reason, not experience, persuade us that there may
One frightful crash be heard, and all the world be swept away.

But ere on this point I begin to utter words of fate,
With more of sanctity, and with sure reason far more great
Than Pythian priestess ever spoke from Phœbus' laurelled shrine,
I would disclose much comfort in this learned verse of mine.
Lest, bound in superstition's chains, thou fancy foolishly
That earth and sky, and sun and moon, the planets, and the sea,
Being divine of body, must endure for endless time:
And so shouldst think it only right that for their monstrous crime,
Just like the giants in the tale, all those should suffer pain,
Whose arguments would rend the world's engirdling walls in twain,
And would essay the brightness of the sun in heaven to blind,
Discrediting by mortal speech things of immortal kind.
Though really 'twixt these and things divine there lies so broad
A distance, so unfit they seem to count with any god,
That they might better serve to show conclusive evidence
Of what can be the farthest from life's movement and life's sense.
For that a mental consciousness and guiding will should dwell
In every body whatsoe'er is quite impossible.
Trees cannot flourish in the air, nor in the briny sea

Can clouds be found, or fish exist in fields of husbandry,
Nor can there blood in logs, or juice in flintstones, ever be.
One certain place is well defined wherein each grows or lies.
So mental qualities cannot without a body rise
Alone, nor live in severance from sinew and from blood.
But if, (and this would seem far less unlike), experience should
Prove that mind's forces can in head, or heels, or shoulders, dwell,
Or be in any other part inborn, and just as well,
They still in one same man, as in one vessel, would abide.
Yet since within this frame of ours some parts seem verified
And ascertained, wherein the soul and mind can side by side
Exist and grow apart, it must be all the more denied
That these outside all body, with no animated frame,
In any rotting sods of earth, in any solar flame,
In water, or amid the deeps of air, could last the same.
Therefore these things are not endowed with properties divine,
Since vital animation can therewith no whit combine.

One thing thou nowise must believe, that those of heavenly birth
Could have their holy dwelling-place on any spot of earth.
For the Gods' nature is so far from sense, and so refined,
That it can hardly be conceived by effort of the mind.
And as it is impassible to blows and handling, thus

It surely can touch nothing which is tangible by us!
For that itself can never touch, which is not touched again.
So must the dwelling-places where the heavenly host remain
Be not like our's, but subtile for their bodies' subtilty,
As at a later stage I will explain at length to thee.
And then, to say that for the sake of man the gods have willed
In all its nature's loveliness this glorious world to build,
And so we ought to praise them for a work so worthy praise,
And deem it will be deathless and endure for endless days:
And that 't is sinful, what by old design of deity
Was founded for the human race from all eternity,
By any force, or ever, to unsettle from its throne,
Or worry it at all, with words to turn it upside down:
And other fictions, which they add to these, are all, my friend,
Mere nonsense. For what profit could the thanks of mortals lend
To happy immortality, that gods should undertake
To do the very smallest thing for human beings' sake?
Or what desire of novelty, after so long a range
Of tranquil years, could gods cajole their former life to change?
A man, to whom his old estate has proven irksome, will
With reason like another one; but he to whom no ill
Has fallen aforetime, whilst his hours sped pleasantly along,



What could have kindled such an one with lust of change so strong?

What harm would it have been to us if we had ne'er been born?
Did hesitating life in grief and darkness lie forlorn
Until the birthday of the world lit up its primal morn?
For man once born, whoe'er he be, must needs desire to play
Life's part, so long as happiness and pleasure bid him stay:
But one who ne'er has tasted of the love of life, nor been
Upon its roll, is he the worse for this? Not so, I ween?

Again, whence did the gods obtain the model of their plan
For making things, or get their first idea of a man,
So as to know and see in mind what they were fain to make?
By what means did the force of first-beginnings on them break,—
What wondrous powers by changing place among themselves they have,—
Unless of her creative work Nature a sample gave?

For first-beginnings in such throngs and in so many ways,
Hastened by buffetings from e'en the earliest of days,
Or by their own intrinsic weight impelled, have through the air
Been borne to meet all sorts of ways, essaying everywhere
Whate'er by combination they could anyhow create;
That it is naught to marvel at, if into such a state

They fell at last, and into such a course of movement came,
As by renewal keeps this sum of things for aye the same.

But even if I knew not yet what first-beginnings were,
From the mere system of the heavens I none the less should dare
This to assert, and on the strength of other facts would swear,
That what we see about us was by no divinities
For man prepared: earth stands so full of blemish, as it is.
In the first place how much is hid by the vast spread of sky.
Then much encroaching mountains and huge forests occupy,
Where wild beasts lurk; and rocks fill much, and stretches of morass,
And seas which sever shore from shore by widths we cannot pass.
Next in almost two thirds of it the fierceness of the heat,
Or the incessant fall of frost, all human efforts beat.
And what of land for tilth is left e'en Nature would insist
On choking up with briars, did man's forces not resist,
Wont for the sake of very life the two-pronged hoe to wield
Though groaning, and with down-pressed plough to cut across her field.
For did we not earth's teeming sods well furrow with the share,
And subjugate her soil, and so a stimulus prepare,
Her crops would of their own accord ne'er reach the limpid air.
And even then sometimes, when these, reared with enormous toil,



Deck all our fields with greenery, and bloom above our soil,
Or too much drought of cloudless suns will parch and wither all,
Or sudden rains will ruin them, or hailstones' chilling fall,
Or with one furious hurricane wild weather lay them low.
Nay, but beyond all this why should dame Nature feed and grow
Dread tribes of savage brutes, the foes alike by land and sea
Of humankind? Why must each time of year so constantly
Bring its diseases? Why does death untimely stray around?
Then too the speechless infant child lies naked on the ground,
Like some poor sailor cast ashore by raging waves, in want
Of all that fosters life, as soon as nature's struggles plant
Him newborn from his mother's womb upon the shores of light,
And fills with dismal wailings all the place, as is but right
With life before him to go through, and all its miseries.
But sheep, and cattle, and wild beasts of every sort, increase.
These have no need of rattles or of broken baby-talk,
Or kind wet-nurse's soothing words, nor, when they go to walk,
With every changing season change of garments too must wear.
Nay these have no occasion arms to don, or walls to rear,
To guard their goods; for earth herself for all with bounteous hand
Brings forth from nature's varied stores all that their wants demand.

Seeing then, to begin, that earth and water in their mass,
And burning fire, and lightest whiffs of air that breathe and pass,—

And these four things the total sum of all this world supply,—
Are fashioned of a body that was born, and so must die;
The nature of the universe must needs be judged thereby.
For whensoe'er the parts and limbs of anything one sees
Are formed of body which was born and shape which perishes,
Experience shows us that the whole will some day perish too,
And had a birth-day. Therefore since in everybody's view
The world's chief parts and members get worn out and made anew,
We may be well assured that heaven and earth at some time some
Time of beginning had, and both will have their time of doom.

Yet think not, pray, that I herein was stealing an unfair
Advantage, when I said that earth and fire both mortal were,
And took it quite for granted that the water and the air
Would die, and all be born afresh the selfsame course to run.
In the first place some parts of earth by constant heat of sun
Burned up, and trampled by the tread of many passers' feet,
Breathe themselves out in dust like clouds, as subtile and as fleet,
Which mighty winds disperse abroad throughout the atmosphere.
And portions of the soil to marsh through rainstorms year by year
Revert, and wasting rivers gnaw their hollow banks away.
Besides all this whatever gives to other in its day



Is recompensed, and since beyond a doubt our mother earth
Is proved the common grave of all whereto she gave their birth,
She too must surely lose in bulk, and waxing be renewed.
And next, that fountains, rivers, seas, for ever with fresh flood
Are filled, and that our water-springs well on through circling years,
It needs no argument to show. The simple fact appears
Its own best proof. Deep waters flow on all sides; but they lose
Their surface, and are in the main no whit too much for use;
Partly because the sweeping force of storm-winds o'er them plays,
And lessens them, together with the sun's absorbing rays,
Partly because through all the ground beneath they get dispread.
For all the saltness filters off, and to its fountainhead
The liquid matter purified is surely backward sped,
Thence o'er the lands to turn again in volume clear and sweet,
Where'er before the channel led its waters' limpid feet.
Now air I must just mention, whose whole body, so to say,
Is altered in a thousand ways each hour from day to day.
For whatso other things throw off will all and alway soar
Into the vasty sea of air: and did not this restore
To these things other bodies, and renew them as they waste,
All would ere now have been dissolved, and by thin air replaced.
Air therefore never ceases out of other things to grow,

And into them to lapse again: for all things ebb, we know.
The bounteous source of streaming light, the sun mid yonder blue,
Unwearied also floods the skies with brilliance ever new.
Beam after beam in infinite succession he supplies;
For all his brightness, shed in turn, in falling fades, and dies
Where'er it falls. The truth of this thou hence may'st shortly know.
The moment that a heavy cloud begins to pass below
The sun, and sunders as it were in twain his shafts of light,
Immediately the lower part of these is lost outright,
And, wheresoe'er the clouds are borne, deep shadows dim the land.
From this thou may'st perceive that things fresh radiance demand
For ever, and that beams when once shot forth fade fast away,
And that no otherwise could aught by sunshine in the day
Be seen, except the fount of light gave ever fresh supply.
Why e'en these nightly earth-born lamps of ours, by which we ply
Our work, the hanging cresset, and the torch with many a spark,
That rich in pitch casts flashes clear athwart the gathered dark,
Haste on the self-same principle by ministry of heat
To shed fresh brightness, trembling as they eagerly compete
In flashes, nor does light, as though cut off, e'er quit the spot,
So fast do all the other jets make haste the sudden blot
Of one gone out, by giving birth to fresher flames, to hide.

Thus therefore should we deem the sun and moon and stars supplied
Store upon store with splendour which they evermore give out;
Though each successive beam they shed is lost beyond a doubt;
Lest thou shouldst deem that these perchance uninjured last for aye.
Once more, dost thou not see how stones by time are worn away,
How lofty castles crumble down, how rocks themselves decay,
How fanes and images of gods, grown weary, crack and gape,
And even their sacred majesty avails not to escape
Fate's limits, or contend against the course of nature's laws?
Do we not see the monuments of heroes full of flaws
Demanding for themselves, 'Dost thou not think that we grow old?'
Are rocky masses never from the tops of mountains rolled,
Too weak to stand the mighty stress of time that has an end?
Yet these assuredly would not be cloven and descend
So suddenly, if they had borne through ages infinite
Without a crash the torturings of angry time's despite.

And now look here at this, which holds all earth in its embrace
Above us and around us. If, as some say is the case,
This begets all things from itself, absorbs them where they die,

'T is proved to have been born, and to be mortal too, thereby.
For what feeds other bodies from its own must needs, 't is plain,
Be lessened, and remade whene'er it takes them back again.

Moreover on the theory that heaven and also earth
Have been from everlasting, and have never known a birth,
Why then before the wars of Thebes, before the fall of Troy,
Did no more ancient feats the songs of older bards employ?
Where has so much heroic deed been buried, that its name
Blooms not forever, shrined within the monuments of fame?
But freshness marks the universe, our world itself is new,
And not long since began to be, according to my view.
And this is why some arts are now already in their prime,
Some still are growing: skill has much improved in recent time
Our seamanship: musicians but just now have harmony
Produced: nay only lately has this scheme and theory
Of all things' nature been put forth, and I the first am found
Able to clothe its truths divine in words of homely sound.

Yet if thou think'st that all has been the same before to-day
But that through fiery heat the race of man has died away;
Or cities have been lost by some great shaking of the world;
Or that through ceaseless deluges of rain the rivers hurled
Their hungry floods upon the lands, and swallowed towns and all



Thou all the more must yield, and own that some day there will
fall
On earth and heaven the final blow of overwhelming fate.
For when such great disorders and such perils tried th' estate
Of the then world, had these but been with greater damage fraught,
Destruction had been far and wide with total ruin wrought.
Nor is there any reason why ourselves should have to die,
Save that we too fall ill of those same maladies, whereby
Nature from life has carried those who in the graveyard lie.

Furthermore all things which endure for ever, either must,
Though being solidly compact of bulk, repel a thrust,
And suffer naught to find its way inside them to displace
Their closely-fitting portions, as with body is the case,
Whose first-beginnings' nature we described some while ago;
Or else must last eternally because no sort of blow
Can e'er assail them, like the void, which, as before averred,
Remains intangible, and by no stroke was ever stirred;
Or else because around them there is left no empty place
Whereto their parts might sever, and be scattered into space,
As now the total sum of things eternally abides,
Because there is no place for aught to fall to, and besides
There are no bodies which can smite and smash it with a blow.
But earth is not by nature, as I once essayed to show,

Of solid mass, because therein commingled void is found;
Nor yet does it resemble void; and bodies too abound,
Which any day by chance may rise from out the infinite,
This universe of ours with one wild storm to wreck outright;
Or bring some other sudden risk of ruin on our race.
Nor is there any lack of room amid the depths of space
To hold the scattered fragments of the dead earth's broken wall.
Or else some other force may strike and speed it to its fall.
Therefore the gates of death are not shut fast against the sky,
Or sun, or earth, or ocean's waves how deep soe'er they lie.
But open stand awaiting them with wide-extended jaws.
Wherefore no less we must confess that for this very cause
They all had once a birth; for things, whose bodies mortal were,
From time without beginning to the present hour could ne'er
Have set at naught the mighty force of measureless old age.

Next, since the chief components of the world such warfare wage
Forever 'mongst themselves, stirred up by most unhallowed strife,
Seest thou not that some limit may be set to end their life
Of long-drawn quarrel? Yonder sun with other heat, may be,
Will drink up all the waters, and so gain the mastery.
This they would fain do now, but all their efforts naught attain,
Such vast supplies the rivers give, which threaten, with the main



And its unfathomed pools, the whole existing world to drown.
Vain threats! because the gusts of wind across its levels blown
Decrease it, and the sun on high absorbs it by his rays.
And these between them trust to make all dry, before the days
When water's gathered powers the end they purpose can have won.
So, breathing war, on even terms their strife they carry on,
Vying to win supreme control the whole vast system o'er.
And fire once proved in bygone years awhile the conqueror,
And water once, as story goes, above the fields was king.
Now fire was uppermost, and burned and licked up everything,
When, bolting wildly from their road, the horses of the sun
Dragged Phaëthon across the air through all the worlds to run.
But the almighty Father then, uproused to bitter ire,
Hurled overweening Phaëthon by one swift bolt of fire
Down from behind his steeds to earth, and while through air he fell
The sun encountered him, and caught the inexhaustible
Lamp of the world, and yoked again and drove the scattered team
All trembling back to the old course, till nature 'gan to beam
Forth newly as he drove. So sings the old Greek poets' song.
But truthful reason proves the tale as far as can be wrong.
For fire may get the upper hand, when matter's bodies rise
Out of the infinite in more than common quantities:
But then its strength falls off again, by some means overcome,

Or all would by the scorching air in burning find their doom.
So water once began to rise, and won unwonted sway,
As legends tell, and many towns and people swept away:
But when the force, whate'er it was, that from the infinite
Arose, was somehow turned aside, the flood's destructive might
Ebbed quickly, rains were stayed, and streams with lesser current ran.

But by what steps the gathering of matter first began
Foundations for the earth, and heaven, and ocean's deeps, to lay,
And fix the course of sun and moon, it next is mine to say.
For not by any forethought, or by shrewdness of their own,
Into their proper places were things' first-beginnings thrown;
Nor from the first how each should move was any bargain made.
But since their multitude has aye in many manners strayed,
Hastened by buffetings from e'en the earliest of days,
Or by their own intrinsic weight impelled, in countless ways
To meet at hazard, and to try all kinds of gatherings,
How by combining they could form,—and then what sort of,—things,
It fell that, after wandering through time unmeasured past,
Essaying every movement and all unions, these at last
Came suddenly together in such order, that therein
Was found of many mighty things the primal origin,



Of earth, and sea, and sky; and life's first thread thereout was spun.
None then could have perceived the disk and brilliance of the sun
Flying on high; then all the great world's constellations were
Invisible, and sea, and sky, and earth itself, and air;
Nor could a single thing be seen like those which now we see;
But a strange hurly-burly, massed, as 't were, confusèdly,
Of first-beginnings of all sorts, whose discords evermore
Joined battle, forcing routes and weights and junctions into war,
Clashings and movements, intervals and blows, disordering;
Because, through the unlikeness of their forms and fashioning,
They could not all together thus in combination dwell,
Nor motion generate to one another suitable.
So then the parts began to split, and like things to combine
With like, till by degrees the world acquired a faint outline:
Its elements were sundered, and its place to each assigned
Of its great parts: that is, the skies from earth grew well defined;
The sea to regions all its own unmingled waters drew;
And ether's fires dwelt by themselves pure and unmingled too.

For first of all the bodies which of right to earth belong,
As heavier and more closely knit together, throng on throng,
Met at the centre, and took up the very lowest place:



And as more tightly these among themselves would interlace,
The more they squeezed out bodies whence the sea, and stars, and sun,
And moon were made, and this wide world's encircling walls begun.
For all of these from atoms far more smooth and far more round,
And of much smaller magnitude, than those of earth are found
To have been formed. So first of all through subtle openings
Fire-laden ether burst from parts of earth, and on its wings
Bore lightly off a host of seeds of fire and fiery heat.
Just as we often see above our heads and 'neath our feet,
When first across the grass, that gleams with diamond lights of dew,
The ruddy rays of sunshine fall with morning's dawn anew,
And quiet pools and streams that run for ever skyward breathe
Gray mist, the very earth appears to smoke as from beneath:
Till, when these exhalations are united up on high,
Clouds' denser body under-webs the brightness of the sky.
So likewise ether, being light and very quickly spread,
Assuming denser body, through the region overhead
Swept far and wide on every side towards the parts of space,
And hemmed all other things within the grasp of its embrace.
Next after this the sun and moon began to get their birth,
Whose globes revolve in air between the ether and the earth.
And these nor earth has e'er annexed, nor ether made its own,



Since they have neither weight enough to bid them settle down,
Nor are so weightless as along those highest realms to roll;
But still they lie betwixt the two, as portions of one whole
Vast universe, and turn around live bodies; just as we
Know that, though certain limbs of ours are resting quietly,
There may be others which the while through active movement fare.
Then, when these atoms had withdrawn, earth all at once, where'er
At present tracts immense of blue wide-spreading ocean lie,
Fell in, and filled with briny floods the hollows formed thereby.
And day by day, as more and more the upper ether's heat,
And the sun's rays upon the earth's extremest threshold beat
On every side, and narrowed its extent by constant blows,
Forcing it round its central point in denser mass to close;
So much the more pressed out of it the brackish sweat arose,
Increasing, as it trickled through, the floating fields of sea:
And bodies too of heat and air in greater quantity
Escaped thereout, and flew abroad, condensing day by day
The shining regions of high heaven, from earth so far away.
Then plains subsided, mountains then grew steeper and more steep
Of slope, for rocks could not sink down, but evermore must keep
Their places, nor could every part yield equally in fact.

So then the weighty mass of earth, with body quite compact
Stood forth complete; and all the mire of all the world, as 't were,
Flowed to the bottom by its weight like lees, and settled there.
Hence sea and air, hence ether's self with all its fires, remain
Of fluid body pure, and naught extraneous contain.
And some than others lighter are; most liquid of them all
And lightest, ether floats above the winds aërial:
Yet suffers not its body with the tempest or the breeze
To blend: the furious hurricane may overset all these,
And fickle storms may harry them with ever-changing blows,
It with its fires glides surely on, nor altered impulse knows.
For that the ether can flow on with changeless force and slow
The Pontic sea gives evidence, whose waters always flow
With one same tide, and ever keep one tenour of their way.

Now let us sing the laws which stars in moving must obey.
And firstly if the mighty orb of heaven around us rolls,
We must affirm the pressure of an air on both its poles,
To hold it to its place, and shut it in on either side;
And must suppose some third air flows above, whose constant tide
Tends as the world's eternal stars tend, twinkling as they go;
Or that this third in opposite direction from below

Acts, as we see our rivers turn a wheel or watermill.
Or it may be that heaven itself remains forever still
In one place, but the signs which gem its firmament do not,
Either because quick particles therein of ether's hot
Candescence are enclosed, and these, in seeking some way out,
Turn round and round, and wheel their fires Summanus' realms throughout;
Or else because some outer stream of wind, begot elsewhere,
Drives on their circling lights; or else it may be that they fare
Self-moved abroad, as appetite induces them to stray
At call, and feed their flaming fires at large on heaven's highway.
For 't is no easy task the rules of what goes on in this
Small world of ours to settle. But what can be, and what is,
In all creation's many worlds, on many patterns made,
'T is this I teach, the many laws in sequence due arrayed
Explaining, which enable stars in all its space to move:
And one of these at all events most certainly must prove
The cause of the stars' movements, though to dogmatize which one
Would ill beseem enquirers, who but step by step go on.

Now that the earth may quiet in the world's mid place remain,
Its weight must lessen by degrees, and gradually wane;
And there must underneath it lie some thing of other kind,
From time's beginning thoroughly united and combined

With the world's upper air wherein its life is situate :
And hence the air is not depressed by its excess of weight.
Just as with us a man's own limbs no burden are to him,
Nor is the head a weight upon the neck, nor do we seem,
Though the whole body rests upon the feet, to feel the load ;
While any heavy thing at all, accruing from abroad
And laid upon us, hurts, although itself be often less :
So much it matters what may be each thing's true business.
For earth too is in nowise some strange body, from elsewhere
Produced, and all at once thrust in upon the alien air ;
But at the world's first birth therewith contemporaneous
Was born, a definite part of it, as our limbs are of us.
And, more than this, when earth herself by some great thunder-
peal
Is shaken, all things over her are made to rock and reel ;
And this could from no other cause occur, except her ground
In some way to the realms of air and heaven itself were bound :
Because in fact by common roots and closely intertwined
These all, since time began, have in one body been combined.
See'st not too how these limbs of ours, in all their weight's despite,
Are still sustained by the soul's force though infinitely slight,
Because they are together joined in unison so tight?
And then what is it that can lift the body's agile flight
In leaping, save the might of mind that drives the limbs along?



Now dost not thou perceive how e'en a slight thing can be strong,
When coupled with a heavy frame, as air is while it swims
With earth through space, and mental force when penned in fleshly limbs?

Again the surface of the sun can in no great degree
Be bigger, nor its warmth be less, than eyesight seems to see.
For whatsoe'er the distance be, from which a fire can throw
A ray of light, or cause our limbs with wafted heat to glow,
The interval steals nothing from the body of the flame,
The fire to look at is no jot diminished, but the same.
Accordingly as sunshine's warmth, and all the brightness shed
Therefrom, can reach our feelings, and a sense of comfort spread,
The bulk and figure of the sun must e'en be what we see,
And none may make it less, or make it greater, truthfully.
The moon too, whether from her car a borrowed light be thrown,
Or whether from her form she pours a brightness of her own,
However this may be in fact, with bulk no bigger goes
Her rounds, than what our eyes behold would lead us to suppose.
For everything we see, when some long stretch of atmosphere
Divides it from us, blurred in shape and outline will appear,

Before it loses size. And so the moon in consequence,
Because a brilliant face and lines distinct she aye presents,
Is just such up on high, with all the marks that notch her sheen
At end, and just as big, as by our vision she is seen.
And lastly all the fires which we behold in ether's space—
Since all the fires which we on earth encounter face to face,
Whileas their flickering is bright, their burning clearly shown,
Are seen from time to time to change but little up or down—
Must likewise neither fall, save just a little bit, below
Their seeming form, nor greatly can exceed the size they show.

Now let one fact, though seeming strange, astonish thee no whit,
That such a very tiny sun should so much light emit,
As all the breadths of sea and land and all the depths of sky
To fill and flood, and bathe the world in fervid heat thereby.
For it may be that here a wide full-flowing spring is found,
For all the world aye welling forth to scatter light around,
Because from all that very world the elements of heat
Assemble from all parts and here in one vast concourse meet
Together, hence to pour their warmth from one sole fountain-head:
For hast not seen how far a small fresh-water spring will spread
In freshets o'er the meadows, and at times submerge the plain?



Perhaps too though the sun itself no mighty fires contain,
Its heat the circumambient air with warmth may permeate,
Provided that the air be in a fit receptive state
To kindle, e'en though smitten by small rays of warming light;
Just as we sometimes see the spark a pine-knot drops at night
Set widespread fields of standing corn or stubble in a blaze.
Or may be, when the sun his lamp of rosy hue displays
Aloft, he bears about him, though its heat be all unseen,
Much fire, and this, though flashes ne'er betray its hidden sheen,
Is hot enough to give his beams full vigour as they fall.
Nor are the sun's ways simple or self-evident at all.
Why from his summer quarters he repairs towards the realm
Of wintry Capricorn, and thence, like ship with ported helm,
Sails backward, and the torrid goal of Cancer's solstice seeks:
Or why the moon should travel in the course of four short weeks
The very road on which he spends twelve months in every year.
No simple cause, I say, for this has yet been made appear.
The first of possibilities how all this happens thus,
As was the venerable view of sage Democritus,
Is that, as stars from this our earth at lesser distance lie,
They less are carried onward by the whirling of the sky,
Because its impetus in these low regions is more slow,

Its might of motive power more slack, and gradually so
The sun is left with all the stars that follow in his wake
Behind, because much lower than the blazing zodiac.
And this is even more so with the moon: for since her sphere
Runs its course lower, farther from the sky, to earth more near,
So can she less with heaven's bright signs maintain an even race.
For in proportion as the whirl that moves her slackens pace,
Since she lies lower than the sun, the burning stars on high
More quickly overtake her, and more quickly pass her by.
Wherefore she seems to reach each sign in turn more rapidly,
Because they faster come again to her in verity.
Or else perhaps at certain times, while on his course he goes,
From the cross corners of the world alternately there blows
A wind upon the sun, which from the summer stars can thrust
Him down to winter's turning-point, where all is stiff with frost,
And in due season from the shades of freezing cold again
Drive him to those hot regions where hot constellations reign.
By parity of reasoning the moon, we may conclude,
And those stars whose great orbits we in years scarce see renewed,
May this way move or that through gusts of alternating air.
See'st thou not how in opposite directions winds will bear
Clouds at one time, the low one way, another way the high?



Then to yon stars that journey through ether's vast circles, why
Should we like power of floating on opposing tides deny?

But Night the earth in sable dress of densest darkness wraps,
Either when after his long race the sun has touched perhaps
The end of heaven, and wearily breathed out his latest flame,
Shaken with travel, weak with waste of air through which he came;
Or else because the selfsame force now bids him turn and move
Below the earth, which heretofore has borne his orb above.
Matuta too at certain times along the shores of air
Pours forth the rosy tints of dawn, and spreads her brilliance there,
Either because the same sun may from 'neath the earth return,
Catch hold of heaven too soon, and try with rays to make it burn;
Or because fires assemble then, and many seeds of heat
Have somehow grown accustomed at a certain hour to meet,
Which ever thus produce anew the birth of solar light:
As runs the ancient story, that from Ida's mountain-height
The watcher looks on scattered fires when morning faintest glows,
Which into one mass gather, till thereout a circle grows.
And this herein should not at all so odd appear to be,
That all these seeds of fire can with such punctuality
Flow all together, to renew the splendour of the sun.
For many strange developments in many things at one

Set time occur, as we can see. When certain seasons come,
Our shrubs break into blossom, at set times they drop their bloom.
So at a time no less precise, be it of age or youth,
The old man's teeth drop out, the boy is conscious of the smooth
Down of pubescence, and soft hair that hangs on either cheek.
Snow, rain, and lightning, clouds and winds, if further we must seek
Example, come not oft but at set seasons of the year.
For when things' primal origin of cause has everywhere
Been thus, and from the first the things themselves aye thus fell out,
In sequence sure and well defined e'en now they come about.

So too the days may lengthy grow, the nights may dwindle fast;
And then the light get shorter, and the darkness longer last;
Either because the same sun, 'neath the earth or high in air,
Divides the realms of ether in his course by curves unfair,
And underneath us and above us shares unequally
His round, and, whilst he robs one side of so much brilliancy,
Gives back his theft to the other at his reappearance there,
Till coursing through the heavens he comes to that star-cluster, where
The knotting of the year puts night and day upon a par.



(For when the blasts from north and south at equal distance are,
And he rides midway, heaven its poles by no less difference
Parts, owing to the station of that whole bright circle whence
The stars gleam, threading which the sun his winding yearly ways
Completes, illuming earth and heaven alike with slanting rays.
As has been published in the scheme of those, who have set down
Each spot of heaven on parchments, with its bright lights duly shown.)
Or this occurs because the air in some parts has become
More dense, and so the sun below the earth 'mid clinging gloom
May quaver and stick fast, and scarce have force enough to rise
To upper air; and darkness thus in winter longer lies
Untroubled, till the radiant sign of dawning 'gins appear.
Or else because these germs of fire, at certain times of year,
Faster or slower, turn by turn, are wont to coalesce.
Which cause the sun to rise in certain spots: and I confess
This gives no little colour to the words of those who say
That these by gathering produce a new sun every day.

The moon may shine with borrowed rays when smitten by the sun,
And day by day with greater force may turn her beams upon
Us and our vision, as from his bright orb she draws away,

Until at last straight opposite she sheds her fullest ray,
When her young soaring splendour looks upon him as he dies.
And then her light may bit by bit be hidden from our eyes;
And rightly so, as, nearing by degrees the full sun's shine,
Forth from the other side of heaven she glides from sign to sign:
As those make out, who fancy that the moon is like a ball
In shape, and holds upon her course beneath the sun withal.
Yet there are reasons why she may with radiance all her own
Revolve, and why such changing forms of brightness should be shown:
Because some other body may glide with her in her sphere,
That meets her in all sorts of ways, and aye will interfere,
But goes about its work unseen, quite destitute of light.
Again it is conceivable that, like a ball, she might
Be only on one half her face with sheeny brilliance dyed;
And, as she wheels her globe, might show new phases, till the side
In all its fulness, whereupon the tints of fire abide,
Is turned towards us, and we gaze upon it open-eyed.
Then she might slowly backward turn, by bits withdrawing all
The light-illumined portion of her smoothly rounded ball:
As the Assyrian learning of Chaldeän seers avers,
And tries to prove against the skill of our astronomers.
As though what each side fights for might not prove alike the case;

Or reason were why this scheme less than that thou shouldst
embrace.
Lastly why new moons could not be produced for every day,
Of certain shapes, to follow each on each in fixed array,
And, daily born, should not in like succession daily die,
Whene'er a fresh one came their place and function to supply,
Is hard with mastery of speech and logic to maintain ;
When that so much occurs in set rotation is so plain.
With spring goes Venus hand in hand, and Venus' herald
fleet,
Swift-wingèd Zephyr, trips before their steps, and at their feet
Bright mother Flora scatters all the way on which they go
With hues and scents of flowers that shine most fair and sweetest
blow.
Then surely follows parching heat, and therewithal, we find,
Tramps dusty Ceres 'midst the blasts of summer's northern
wind.
Next Autumn comes, and Evius with his mirth-inspiring cry.
Then changing winds proclaim the change of temper in the sky,
Vulturnus thunders loud, and far black Auster's lightnings fly.
At last short days bring snow and frost that stiffens mead and
wold,
And Winter follows, with his teeth all chattering for cold.
So were it less a marvel, if the moon to birth were brought

At certain times, and so at times as certain came to naught,
Considering how many things at certain times are wrought.

Just so eclipses of the sun, the moon's bedimming too,
May properly be deemed to one of many causes due.
For wherefore should the moon have leave from sunshine's glad-
some ray
To hide the earth, or bar his head on high from shedding day
Earthward, by thrusting 'gainst his beams of fire her lightless side,
Whilst at the same time such a right is totally denied
To other things, which on their course in darkness always glide?
Why should the sun not own the power, when tired, to lay aside
His light at certain times, and then again to shine anew,
When on his journey in the air he once has travelled through
The regions hostile to his fires, that quench and kill his flame?
Why should the earth be able too, in manner just the same,
To steal her brilliance from the moon, and hold the sunshine
back,
While monthly she slips through her cone's strait shadow-haunted
track:
And yet no other body be at liberty to run
Under the moon, or glide above the circle of the sun,
To break their rays off short, and quench the light they would
pour down?



And if the moon be thought to shine with radiance all her own,
Why may she not, in passing through such places as assail
Her light with hostile force, permit her beams awhile to pale?

And now that I have made it plain what reasons may be given
For everything which happens in the wide blue realms of heaven,—
So that we now can recognize what motive impulse sways
The sun in various stages, and the moon's successive ways,
And by what means their light becomes obstructed and they die,
O'erspreading unsuspecting earth with sudden gloom thereby,
When, as it were, they close their eyes, then open them again
To gaze with lustre clear on land and water, hill and plain,—
To the world's childhood I return, when earth's soft soil was young,
To tell what at her bidding first to birth in daylight sprung,
And boldly to the fickle winds its tender verdure flung.

In the beginning earth gave forth all sorts of herbage green
Around her hills, and covered all her plains with verdant sheen;
With hues of grassy emerald her flowery meadows shone;
And then a mighty rivalry fell all at once upon
All kinds of trees to climb into the air without a check.
For just as feathers, downy hair, and bristles, first bedeck
The limbs of quadrupeds, and frames of birds of mighty wing,
So herbage from the new-born earth, and shrubs were first to spring.

Then afterwards her many tribes of live things she began
To make in many ways, begot on many a varied plan :
For living creatures never can have tumbled from the moon,
Nor did land-animals arise from any salt lagoon.
So to a Mother's name this earth has title full and fair
Achieved, since out of earth were made all things that ever were.
Nay many living creatures e'en to-day are born of earth,
When rainstorms, or hot vapours bred by sunshine, cause their birth :
Wherefore 'tis less to wonder at if more of larger size
Were born, and grew, when earth was young, and freshly formed her skies.
In those first days the feathered fowl, and birds of every wing,
Left their eggs tenantless, expelled at will by balmy spring ;
As even now the katydid unholpen quits his sleek
Thin chrysalis in summer-time, new life and food to seek.

Know too that earth then first produced the tribes of mortal men :
For warmth and moisture in her fields were more than ample then ;
And so, where opportunity of fitting place was found,
Wombs grew to being, by their roots adhering to the ground ;
And when the infants' heat had in due season opened these,
Escaping from the dampness to inhale the passing breeze,

Their mother Nature thither turned earth's apertures, and bade
Her gaping veins pour forth a juice in very semblance made
Of milk; as every woman now, when she has brought her child
To birth, with luscious breast-milk in a little while is filled,
Since all her force of nourishing then to the paps is led.
Earth gave her children food, the warmth their clothing, grass their bed,
In whose abundant softness as in down they lay close-curled.
But then no snaps of bitter cold occurred, when still the world
Was new, nor overpowering heat, nor winds that fiercely blow.
For all things grow together, and wax stronger as they grow.

Wherefore I must once more repeat that earth her Mother's name
Owns by good right; for first of all from out her bowels came
The human family, and she in years nigh limited
Each animal that revels in the mighty mountains bred,
And with them birds of every shape and sort that fly in air.
But since there must have come a time when she no more could bear,
She stopped, like women wearying and worn with length of years.
For all the nature of the world in course of time appears
Entirely altered, change on change its hold on all will take;
Nothing remains like its old self; all things alike forsake

Their stations; nature changes all, and turns them upside-down.
For one thing will turn rotten, weak with age and helpless grown;
Another out of contumely will bourgeon into fame.
Thus passing time allows not that the world should stay the same
In nature, but obliges it from change to fall to change,
Till what it bore it bears no more, to bear what erst was strange.
And many a monstrous creature too the Mother then essayed
To procreate, with wondrous face and limbs as wondrous made;
Hermaphrodites of neither sex, from each alike removed;
Some footless things that aye sate still; some things that handless roved.
Some creatures had no mouth to speak, and some no eyes to see;
And some had limbs that to their trunks were bound so thoroughly,
That they could nothing do, could go nowhither, could not shun
Aught evil, nor could take the good their weal depended on.
And other portents of the kind she bare, and fain had reared;
But all her labour went for naught; for Nature interfered
To stop their increase; so they ne'er could win the wishful flower
Of youth made perfect, nor find food, nor welcome Venus' power.
For many outward things, we know, must be at once in case
For any thing to reproduce and propagate its race.
So many kinds of living things in those days must of need
Have dwindled out through impotence to propagate their breed:

For all the things thou seest, on the breath of life that feed,
On subtlety, or courage, or for last resource on speed,
From time's commencement have relied for safety of their seed.
And there are many creatures too which, just because they are
Of use to us, are kept alive by our protecting care.
Of the first class, its courage has preserved the lion's race
And savage brutes, the fox his craft, the stag his peerless pace.
But every strain of wakeful dogs with bold and trusty breasts,
And all the great varieties of burden-bearing beasts,
The herds of hornèd cattle, and the wool-clad flocks we pen,
My Memmius, have been trusted to the guardianship of men.
For these the ways of wildwood beasts have eagerly eschewed,
To follow paths of peace, and find the full supplies of food
We give them for their uses, though they toil not for it, good.
But creatures whom their nature had with no such gifts endued,
Who could not for themselves provide their provender, nor give
Us some advantage that, for sake of keeping them alive,
They fed beneath our wardship, while we held their foes at bay;
All such beyond a doubt lay bare a booty and a prey
To others, hampered by the bonds their own creation wrought,
Till Nature in a little while reduced their breed to naught.

Yet Centaurs there have never been, or e'er till time is done
Can be, with twofold natures, and two bodies knit in one,

With frame composed of limbs derived from alien origin,
So that their forces could not act on equal terms within.
This, be he dullard as he may, the merest fool must see:
In the first place a horse has reached his prime when just past three;
But this is not the case with boys, for even then they seem
Sometimes their mother's paps to seek and milk them in a dream.
Then later, when the horse, as age creeps on, feels every limb
Reft of its sturdy strength, when joints grow weak, and life grows dim;
Just at that time the boy at last to man would nigh have grown,
His springtide bloom would just have clothed his cheeks with softest down.
So deem not that from seed of men and horses made to bear
Our burthens Centaurs now are found alive, or ever were;
Or that the Scyllas live, whose forms half-seagirt legends bind
With dogs gone mad for girdle, or aught else of such a kind;
Where limbs exist in union, which of course must disaccord,
Because they reach not both at once their prime, nor draw toward
The fulness of their strength at once, nor lose it in old age:
Nor do they love alike, nor in like ways of life engage
By choice, nor are the selfsame things alike for either good.
We see, for instance, bearded goats grow fatter when their food
Is hemlock, which if any man had eaten he had died.

How also, when we know that fire, for all his tawny hide,
Can scorch and burn a lion just like any other kind
Of animal, that lives on earth, of flesh and blood combined,
Could it have come to pass that one Chimæra could avail,
Though triple-shaped, with lion's head, goat's middle, dragon's tail,
Out of its body through the mouth to breathe flame fiercely hot?
Wherefore whoso imagines that such creatures were begot
By Nature, when her earth was new, her sky fresh-builded too,
Resting his whole assertion on the meaningless word 'new,'
May upon just as good a ground go chatter to the crowd
That golden rivers in those days on earth in plenty flowed,
And jewels on the shrubs, instead of flowers, were wont to grow;
And man was born with limbs of strength so great that he could go,
Depending only on his feet, across the deep sea's bed,
Or clutch the sky with both his hands, and whirl it round his head.
Because the fact that many seeds of things in earth were found,
When she began at first to strew her living broods around,
In nowise indicates that she a medley could present
Of beasts, or creatures framed of limbs for other creatures meant;
Since whatsoe'er earth now begets, though vast their quantities,
All sorts of herbage and of grain, all sorts of pleasant trees,

Yet ne'er can in themselves the traits of any others blend;
But each thing on its proper way goes strictly till the end,
And keeps characteristics fixed by Nature's firm decree.

But then a far more hardy race than our humanity
Dwelt in the fields; as was but fair, since they were hard earth's own
Creation, and their frames were built on bigger, stouter, bone
Than ours, and strung with sinews strong through tougher flesh to run,
Not lightly nipped by winter's frosts, or scorched by summer's sun,
Nor apt to change through diet strange or bodily disease.
And many a score of years the sun rolled on through heaven, while these
Lived just the restless, roving, life wild animals live now.
There was no sturdy farmer then to guide the crooked plough,
No man was skilled to work the fields with spade by force of foot,
Or plant young saplings in the soil; none then could even cut
With bill-hook withered branches from a tree of any height.
What rain and sunshine of themselves, what earth by her own might
Gave them unasked, was gift enough to satisfy their souls.
Most of the time they made good cheer mid acorn-yielding boles

Of vast oak-forests, or on fruit of arbute-thickets fed ;
Which now thou seest in winter time put on ripe tints of red,
And earth then more in number bore, and larger too in size :
And many things right hard to eat, which never meet our eyes,
She in her bloom of youth produced to sate unhappy men.
Streams too and fountains summoned them to quench their dryness then,
As now from mighty mountain-sides the plash of waterfalls
Calls loudly to the thirsty tribes of savage animals.
The nymphs' most famous woodland haunts these in their wanderings
Would oft resort to, where, they knew, the smoothest watersprings
Bathe all the humid rocks with full abundance of their flow,—
The humid rocks whereon green tufts of dripping mosses grow,—
And here and there o'ertop their banks, to flood the plains below.
These knew not how to handle fire, they knew not in the least
How to wear skins, or clothe them with the spoils of slain wild-beast :
They haunted woods, and caverns in the rugged mountain-side,
And forests midst whose tangled brush their rough limbs they would hide,
To scape the buffeting of wind, or rain's fast-gathered storm.
These owned no code of manners, nor made use of any form
Of common law, nor looked at all to serve the commonweal.

Whatever luck might bring him, or his own strong hands could steal,
Each man held fast to, taught for self alone to live and fight.
Then Venus in some woodland glade would man and maid unite,
The latter yielding either to reciprocal desire,
Or to the man's superior force, or strength of passion's fire,
Or to a bribe of acorns, or choice pears, or arbute-fruit.
These, trusting to their wondrous skill alike of hand and foot,
Were wont wild animals to track, a lion, boar, or bear,
With stones to throw, and clubs of weight tremendous, to their lair.
And most they overcame; from some they hid, and so went free.
And just like peers of bristly swine they laid contentedly
Their wild limbs naked on the ground, if unawares by night
Surprised, and with dry leaves and boughs would wrap them as they might.
But then they never screamed nor wept for sunshine and the day,
When darkness led their trembling feet on open wolds astray.
They waited silent, every sense deep sunk in quiet sleep,
Till the sun's rose-red torch should bid light to the welkin leap.
For as, since they were little, they had aye been used to see
Periods of darkness and of light succeed alternately,
No wonderment occurred to them, no lack of faith at all,
Lest haply night should muster might to hold the earth in thrall

Eternally, by carrying away the solar ball.
Their cares from other sources came: wild beasts would often make
The weary wretches' sleep that sleep whereout none ever wake.
And oft from their rude homes among the rocks they fled for fear
That some enormous lion or foam-speckled boar drew near;
Yea, in the dead of night through dark and tempest oft they fled,
And left their savage guest-folk free to fill their leafy bed.

Yet not more rapidly than now in those forgotten days
Did mortals bid their last farewell to ebbing life's glad rays.
One of them here and there would by the teeth of some wild beast,
Then more than now, be carried off to make its living feast,
Filling the groves and hills and woods with echoes of his groans,
At seeing a live grave engulf his living flesh and bones.
And those whom flight just saved from death, though bitten very sore,
Would hold upon a hideous wound thereafter evermore
Quivering hands, and call on Death with agonizing cries,
Till fearful writhings set them free from all life's miseries,
Unholpen, ignorant of all a flesh-wound needs the most.
But then no single day consigned the thousands of a host,
Marching beneath their flags, to death; no storms the seas could brew

Might hurl a fleet upon the rocks with all its human crew.
Then without cause, or aim, or end, the sea would surge and fret
At times, and just as lightly would its futile wrath forget.
In vain the placid bosom of the deep put forth its wiles,
And decked its laughing waters in deceit with deadly smiles,
Whilst the bold sailor's daring craft lay a dark secret still.
Then utter lack of common food would naturally kill
The ailing; now by surfeiting of gluttony we sink.
Men then sometimes through carelessness or accident would drink
The poison, which they nowadays pour for their nearest kin.

Next, when they once had gotten fire, and skins, and huts wherein
To shelter them, and woman joined with man had into one
Estate of settled living passed, and both the joys had won
Of mutual help, and seen their own young children round their knees,
Then first the human race began to soften by degrees.
For one result of fire was that their chilly bodies bore
The outdoor cold no longer with the hardihood of yore;
And Venus made their vigour less; and children's winning ways
Quelled easily their parents' proud reserve of older days.
Then too near neighbours first began in friendship's pledge to seek



Promised security from wrongs they promised not to wreak ;
And womankind and children they commended to its care,
When with imploring gestures, and the halting words of prayer,
They pleaded that 't is right to show compassion on the weak.
And though no covenant e'er was made that no man dared to break,
Yet the good greater part observed their compact in good faith ;
Or else the human race had then been swept away by death,
And ne'er had able been to these far later days to reach.

Furthermore Nature of herself broke in man's tongue to speech
In all its sounds ; for service names to single things were given,
Somewhat in the same way as now we see young children driven
To gestures, when, since speechlessness as yet has locked the tongue,
Their fingers point at any thing in sight for which they long.
All things are conscious of the powers which they will put in play
Hereafter : ere a bull-calf's horns will sprout for many a day
Beyond his brow, he butts with them, and pushes when annoyed
Or angered ; panthers' cubs and whelps of lions are employed
In battling 'mongst their fellow-whelps with paws and claws and teeth,
When hardly yet or tooth or claw has pushed beyond the sheath :

And so we see all kinds of birds, that float in air, confide
In flight, and spread their wings for aid, though trembling, opened wide.
Wherefore to think that any man distributed its name
To each thing extant then and there, and that mankind thus came
To learn the words it uttered first, is nonsense. How could he
Call all things by their names, and bid his tongue so perfectly
Speak sundry sounds, when others naught of the same kind could do?
Besides if other folk had ne'er among them hitherto
Made use of language, whence in him was sown the consciousness
Of its advantage, whence was given the faculty to guess,
And mentally to see, what he had set his mind to do?
And then for only one lone man 't were hopeless labour too
To force a conquered crowd to choose to learn the way to call
Things by their names. We find it no such easy task at all
To teach and coax deaf folk to do what nature bids: and these
Would ne'er endure or suffer long, but for the wish to please,
The thundering of sounds not heard before upon their ears.
And after all what in the fact so very strange appears,
If human-kind, endowed with powers of tongue and voice, did learn
By uttered speech things different in feeling to discern?



When mere dumb cattle, ay and all wild beasts that haunt the woods,
Are wont to utter sounds, that change and vary as their moods
Vary with fear, or suffering, or joy anticipate:
As proved by well-known facts, that we need hardly stop to state.
When the full drooping open lips of huge Molossian hounds
Begin to growl in ire, and bare their hard-set teeth, the sounds
Of anger, pent but threatening, are quite another thing
Than the loud bark, whose echoes make the hills and valleys ring.
When in a fondling mood they lick their puppies with their tongue,
Or toss them up between their feet, and catch, and feign to long
To swallow them, but gently and with teeth forbid to bite,
The yapping of their voices is of timbre sundered quite
From their deep baying when alone in some shut house, or when
With crouching form they howl, and shrink to 'scape the blows of men.
And is there not a world of change in sound between the neigh
Of some young stallion, when amongst the mares he has his way,
Smitten at full of spring-tide by the spurs of wingèd love;
And his wide nostrils' tremulous snort, when hosts to battle move,
Or whinney, when from other cause his limbs a-quaking fall?
Lastly each several sort of fowl, and feathered creatures all,
The goshawk, and the osprey, and the gull, whose hookèd beak

Dives 'neath the salt sea-water thence his livelihood to seek,
Oft scream at other times in quite another voice than they
Utter, when quarrelling for food, or struggling with their prey.
Nay, certain birds, as seasons change, are wont to change the tone
Of their discordant clamour: long-lived crows and rooks are known,
Or old wives lie, sometimes to cry for showers of soaking rain,
Sometimes of lack of stirring wind and breezes to complain.
Wherefore if change of feeling can compel an animal,
Though naturally dumb, from time to time to change its call,
How far more rational it is that diverse objects then
Should have by sounds diverse of voice been set apart by men!

And now, lest thou make question in thy heart though not aloud,
Fire first was borne to earth and man by lightning from a cloud,
And from that fire all warming flame has been distributed.
For we e'en now see many things with fire from heaven o'erspread,
When lighted by the thunderbolt's hot levin from on high.
And also, when full-branching trees by storm-winds passing by
Are struck and sway, till bough on bough works crosswise to and fro,
Fire is produced by their great might, and now and then the glow
And heat of flame flash forth thereout a moment's space, as tree



With tree rubs bole on bole, and branch on branch, persistently.
So either of these causes may have fire on men bestowed.
Next afterwards the sun himself taught them to cook their food,
And soften it with fire-heat, since they saw in those old days
So much afield grow soft, o'ercome when stricken by his rays.

And more and more, as time went by, their habits and their food
They changed by new devices, when some kindly man, endued
With warmer heart or intellect more able, showed the way.
Then kings 'gan build the walls of towns, and firm foundations lay
Of citadels for strongholds and a refuge from their foes:
And lands and herds they gave away to each man as they chose
For strength of body, or of mind, or comeliness of face:
For stalwart thews and goodly looks won then the chiefest place.
Afterwards wealth came into vogue, and gold was found ere long,
Which stole with ease their honours from the handsome and the strong.
For as a rule, though men be strong, and fair of form or mind,
The rich are wont to go before, the rest to come behind.
Though, if a man by reason's truth would steer his life aright,

To live contentedly on small outgoings is the height
Of wealth: since he who little wants feels never want of more.
But men have longed for power and for renown from years of yore,
That, on a firm formation set, their fortunes safe may be,
And they through wealth may spend their days in calm tranquillity.
In vain: since, vying each from each the highest rank to gain,
They made their path of life a path of peril and of pain;
And envy, like a thunderbolt, has hurled the prosperous
Down from their heights sometimes in scorn to loathly Tartarus:
For highest things, and things that tower the most above the rest,
By envy's, as by lightning's, stroke are smitten oftenest.
So that 't is far more blest a lot in quiet to obey,
Than to desire imperial state, and mighty realms to sway.
Well let men tire themselves for naught, till they sweat drops of blood,
In struggling to push forward on ambition's narrow road:
Forsooth their wisdom is from lips of others ta'en; they seek
Truth not in their own feelings, but in words their fellows speak.
But this nor now is, nor will be, more than it was at first.
Therefore when kings had thus been slain, and pristine rule reversed,
The glory of their royal thrones, the sceptres of their pride,

The peerless badge that marked one head of all the highest, dyed
With gore, bemoaned great honour lost beneath the rabble's tread;
For mobs most fiercely trample that which most they used to dread;
And all things to the dregs of worst disorder fell again,
While each man sought to make himself lord of his fellow-men:
Till some among them taught them how to stablish civil sway,
And settle rules of law, which all might willingly obey.

Because mankind, worn out by need of keeping life by force
Of arm, was growing weak through feuds, and thus for last resource
Stooped sooner of free will beneath the yoke of rules and laws.
For when each man more bitterly prepared to venge his cause
In those days, than the even hand of justice now deems right,
Men soon grew tired of living, where life's only stay was might.

And fear of retribution mars life's prizes e'en when fresh;
Because brute force and deeds of wrong not seldom in their mesh
Of evil catch their authors, and, like birds, come home to roost;
And he, who breaks the common peace by crime, has to his cost
Oft found how hard it is to lead a life of quiet ease;
For though he cheat awhile divine and human enmities,
He aye must feel distrustful, lest his secret should not keep
For ever; when so many men by talking in their sleep,

Or in the ravings of disease, are said to have revealed
The evil deeds done long ago so carefully concealed.

Now what first motive spread abroad the worshipful renown
Of gods among great tribes of men, and crowded every town
With altars, and took pains to set on foot each solemn rite,
Which now in pomp of circumstance and place is still at height
Of favour; till the terror, thence begot in th' human breast,
Compels our race to throng on each set day of holy feast
The shrines it raises evermore the whole wide world around,
Can with but little effort of well-reasoned work be found.
For even then in mind the tribes of mortal folk would make
Themselves a sketch of forms beyond the common, while awake,
And gift them too with bodies far more wondrous, when they dreamed.
To these they would attribute sense, because they always seemed
To move their limbs, and utter sounds proportionally proud
For beings with such noble forms and strength so vast endowed.
And life without an end they gave these creatures brain-begot,
Because they aye were present, and their fashion altered not:
Nay anyhow because they thought that those, who called their own
Such mighty thews, could by no force be lightly overthrown.
And better far than mortals' they supposed their lot to be,

Since from the fear of death, and its vexations, they were free,
Whilst all the while, themselves asleep, they saw such wonders wrought
By them, though yet, toil as they might, they seemed to suffer naught.
Besides they saw in one fixed round the systems of the sky,
The changing seasons of the years, pass regularly by,
But could not of themselves discern why matters should be so.
Thus for escape from all their doubts to gods they chose to go,
Handing the whole world over to be turned as they might nod.
And in the heavens they placed the home and realm of every god,
Because through heaven appear to roll the darkness and the light,
The moon, the day, the night, the stern star-beacons of the night,
Wandering gleams across the face of blankness, flitting flame,
And levin-bolts' sharp crash, the roar that threatens deadly aim,
And clouds, and sun, and rain, and snow, and wind, and storm, and hail.

Oh! sorry race of human-kind! for things like these to rail
At gods, upbraiding them besides with anger's bitterness!
How many sorrows for themselves, how much of sore distress
For us, what tears for children of our children, have they bred!
It shows no piety at all to wheel with covered head
At passing every roadside stone, to visit every shrine,

To fall upon the ground with hands spread out at each divine
Temple of cleansing, or to drench with blood of bull, or cow,
Or sheep, or lamb, their altars, or to pile up vow on vow;
But rather with a mind at ease to look at all around.
For when we upward gaze upon the mighty world's profound
Expanse of sky, and ether fixed beyond the farthest star
That gleams, and think how sun and moon along their courses fare;
Then into hearts, already bowed with ills, another care
Makes entry, and 'gins straight to lift its wakened head on high.
"Does there perhaps some boundless power of gods above us lie,
"Able to turn the shining stars at will about the sky?"—
For lack of proof a doubting soul will always sorely try—
"And has this world we live in had a day of birth at all?
"And will it also have an end? and how long will its wall
"Be competent to bear this strain of infinite unrest?
"Are they indeed by gift of gods with lasting safety blessed,
"Able for endless lengths of time to glide along their course,
"Contemptuous of all the years' immeasurable force?"
Besides is there a man whose soul shrinks not from sheer alarm
Of wrath divine, whose body does not creep for fear of harm,
When, stricken by the awful shock of thunder's bolt, the dry
Earth quivers, and deep rumblings roll athwart the lowering sky?
Nay do not clans and peoples quake, and kings at height of pride



Draw in their horns, by dread of heaven asudden terrified,
Lest for some foul deed wrongly done, some boastful word ill said,
The heavy settling-day be come, when forfeit must be paid.
At sea too when winds bluster, when the fury of the squall
Before it o'er the water sweeps our fleet's high admiral,
With full-recruited legions, with his elephants and all,
Hastes he not to the gods with vows for mercy, seeks with prayer
And trembling that the storm may soon be stilled, and breezes fair;
Though, caught in that wild hurricane, he only wastes his breath,
And none the less is hurried to the shallows and his death?
So throughly is humanity by some deep-hidden power
Ground to the dust that, though Rome's rods be fair, her axes dour,
This seems to spurn them, nay to make them just its laughing-stock.
And lastly when beneath our feet all earth begins to rock,
When some towns shake and tumble, when far more seem like to fall;
Why is it strange that men should scorn themselves for being small,
And leave in self-abasement to the gods the full control
Of Nature's vast and wondrous powers, to regulate the whole?

Once more, at this time copper, gold, and iron too were found,
And silver's heavy weight, and lead's large bulk, upon the ground,

When on the mighty mountain-sides vast woods had been by flame
Of fire consumed, when haply down from heaven the lightning came;
Or when men, waging each with each a tribal woodland fight,
Would fire the jungle where the foe lay camped, to cause affright;
Or when, by promise of the soil's great richness led, they planned
To clear it for rich corn-fields, or for pleasant pasture-land;
Or else to slay wild beasts, and so grow rich upon the prey.
For pit and fire with hunters were in vogue for many a day,
Ere they girt glade about with net, or harried wood with hound.
Howe'er it was, whate'er the cause that bade the flames surround
And crunch the forests bit by bit with terror-waking sound
Down to their very roots, till earth with fire imparted glowed
Red-hot; from out her boiling veins to all her hollows flowed
Converging rivulets of gold, of silver, and of lead,
And copper; and when afterwards men saw them to a head
Collected on earth's surface, gay with many a brilliant hue,
They picked them up, pleased with the smooth fair shimmer of their view;
And looked at them, and saw that each the very size had ta'en,
And aspect to a hairsbreadth, of the hole where it had lain.
And then the thought flashed through them that they too might melt with fire,



And run these into any form or shape they might desire ;
Nay furthermore their treasure-trove by hammering, they thought,
Might to the keenest, finest, edge of cutting-power be brought,
So as to give them tools wherewith to fell the forests tall,
To hew them into timber, and to plane them smooth and small
For beams, and pierce them through and through with chisel, nail, and awl.
So at the first this work with gold and silver they essayed
To do, as frequently as with stout copper's stalwart aid :
But all in vain, the former twain in practice proved but poor,
And could not, like the third, the stress of true hard work endure.
Thus copper was at vantage then, and gold an outcast lay
Neglected for its uselessness and blunter edge : to-day
Copper is down, and gold has clomb to honour's highest place.
So often must things alter rank in time's revolving race ;
Those once at premium become at last of no account ;
And then some other, long disdained, emerging 'gins to mount,
And daily more sought after, dubbed a new discovery,
To bloom in warmth of human praise and worship wondrously.

And now how iron came to use, my Memmius, if thou ask,
The explanation need not prove too tedious a task.
Man's hands, and nails, and teeth, of old his weapons used to be,

With stones, or branches broken from the nearest forest-tree;
Or flames of fire, as soon as fire's invention came about.
Then iron's stoutness afterwards, and copper's, were found out.
But copper, and not iron, came the earlier to use
From its more malleable make, its plenty more profuse.
With copper men would work the ground, with copper they would stir
The waves of war to motion, would thereby administer
Big wounds, therewith would neighbours rob of cattle or of field:
For all devoid of arms to those well-armed must quickly yield.
Thereafter, though by slow degrees, the iron sword became
The fashion, and the copper bill 'gan hide its face for shame;
And folk commenced with iron share to rend earth's upmost clods;
And war's uncertain fights were fought at less uneven odds.
Then men, clad all in armour, learned to climb a horse's side,
And with a strong right hand to grasp the reins his course to guide,
Some while ere double-harnessed they the risks of war provoked;
And coupled steeds were common, ere a four-in-hand was yoked,
Or soldiers mounted chariots armed with sickle or with axe.
Next Carthage taught her elephants with castles on their backs,
Foul serpent-handed brutes, to bear war's missiles in their flanks.
And undismayed dismay to spread through Mars' unwieldy ranks.



Thence, one by one, discoveries, a horrible array,
The sorry soul of Discord bred, to make mankind her prey,
And added to war's terrors fears that waxed from day to day.

Then too men tried to practise bulls to help these works of woe,
And e'en essayed to train wild boars, and loose them on the foe;
Nay some of them would here and there before them on their path
Of war send savage lions, though, to moderate their wrath,
Armed trainers and fell keepers went with chains for company.
The attempt was vain: for these, grown hot with wholesale butchery,
In random wrath would rout the ranks alike of enemy
And friend; now here, now there, they shook the frightful crest that decked
Their heads, till steeds were scared, and few the skilful knights who checked
Their flight, and soothed their breasts to wheel them on the foe once more.
Her angry limbs each lioness with savage bound and roar
Would hurl in all directions: those who met her by the face
She seized, the others from behind, unwary of their case,
She tore, and grasping rolled them, by their wounds undone, beneath
Herself to earth, by crooked claws held fast and mighty teeth.
The bulls would toss their friends sky-high, or trample them to death,

Would gore the horses' bellies, or their ribs, with horned thrust
From under, and with jutting brows raise blinding clouds of dust.
Then too the boar's stout tusk cut down his comrades and allies,
Staining the weapon broken in his body with the dyes
Of his own blood, his own life-blood, in very fury spent,
Till cavalry and foot alike to right-about were sent.
For all the steeds would swerve to shun the stroke of such a jaw
Armed with such cruel tusks, and rear with random hoofs to paw
The empty air, though all in vain: to earth with heavy thud
They tumbled, hamstrung from behind, and added blood to blood.
And if men deemed home-training had by habit reconciled
Their beasts to rule, they soon were ware that service made them wild
Amid the blows, and cries, and flight, and fear, and throng, of men:
And never trainer led his best tame pupil home again.
For wild-wood beasts of every kind would scatter any way;
Just as our elephants, whom steel has wounded sore, to-day
Will run, inflicting on their side infinity of grief.
And if this way they worked, it still nigh passes my belief
To think they had not force of mind to feel, nor eyes to see,
What foul and common wrong they did for all futurity.
Still they did thus, not hoping much to win the battle so,



But, while they died, to hear the wail of mourning from the foe,
Where numbers were deficient, or the stock of arms ran low.

Men wore a knotted garment ere they clothed in woven thread;
For weaving after iron came, since iron perfected
Its instruments: without it there had been no fashioning
The treadles, shuttles, spindles, beams, so smooth to work and sing.
And Nature's self-taught men to twist the tangled threads of wool,
Long before women learned the trick, for men had wonderful
Pre-eminence of skill and craft above their womankind;
Till the rough-fisted tillers of the fields grave fault would find,
And they were fain to yield the task to woman's weaker hands,
And with their brethren share the toil of taming stubborn lands,
Hardening limbs and fingers with the hardness of the toil.

Moreover how to graft a bud, and how to sow the soil
With seed, creative Nature's self had many a sample given.
The acorns dropping from the oaks, the berries timely riven
From bay and olive, swarms of shoots put up in proper time.
Then men were fain to graft new stocks on branches in their prime,
And 'mid the meadows thickets fresh deep in the ground to set:

And then another tilth they tried, and then another yet,
Upon their own sweet plot of ground, and watched the earth improve
Her native fruits beneath the care and culture of their love.
Then daily ever more and more they bade the woods make way
Up the hill-sides, and leave below to tillage wider play;
That on the uplands meadows, pools, and streamlets, might be seen,
And wheat, and gladsome vines, as on the plains, while deep blue-green
Stretches of silver olives marked the borderland between,
Haphazard down the hollows poured on level and o'er mound.
Even as now thou look'st on tints of many hues around,
When with sweet orchards interspersed men beautify the land,
And hung with vines on either side the thriving elm-trees stand.

Men used their mouths the flowing song of birds upon the wing
To imitate, a good long while ere they themselves could sing
A song in such smooth concert as their fellows' ears to please.
Among the gaps in hollow reeds the whistling of the breeze
First taught the rustic crowd how in the hollow stems to blow
Of hemlock, whence they learned in time, by small degrees and slow,



The dulcet plaints that flutes give forth, when pressed by players' hands,
Found here and there 'mid pathless woods, and moors, and forest-lands,
The goatherd's lonely haunts, the home of godlike quietude.
These were the things that soothed their souls, and made them glad, with food
In lavish plenty; for to folk well filled all these seem good.
So oftentimes on the soft grass, a goodly company,
Beside a running stream beneath the shade of some tall tree,
They laid them, and enjoyed their ease at very little cost;
Specially when the seasons and the weather donned their most
Inviting smile, and decked the fresh green sward with wealth of flowers.
Then jokes, and talk, and laughter glad, sped fast the happy hours
Of eve: for rustic minstrelsy had touched its zenith then.
And then in simple wantonness of joy the husbandmen
With woven wreaths of bloom and leaf would head and shoulders crown,
And step it out, and move their limbs to measures of their own
In awkward wise, and mother earth would strike with clumsy heel:
And hence rose many a merry smile, and laughter peal on peal,
For all such feats were newer then, and thus were more renowned.

Then folk who lay awake o' nights a sort of solace found
In drawing many a long-held note, and turning scraps of song,
Or running deftly-archèd lips the reeden pipe along.
And hence our own night-watchmen keep the ancient custom yet—
Though but of late they 'gan to keep fair tune and time,—and get
Meanwhile no jot of pleasure or enjoyment more, I ween,
Than that wild woodland race gat, who beheld earth's virgin green.
For any pleasure while in hand, unless awhile ago
We knew a sweeter, seems the best and sweetest thing we know;
But frequently a better thing, discovered afterward,
Spoils all before, and alters all our earlier regard.
Thus acorns came to disrepute, and men disdain to-day
The beds of grass with leaves bestrewn whereon their fathers lay.
Thus too the robe of wild beast's hide fell into low esteem,
Though he who in those olden days first wore one was, I deem,
Out of mere envy of his prize by ambushed kinsmen slain;
While after all the garment, rent and soiled with many a stain
Of blood, was lost, and never could be turned to use again.
So then the skins of beasts, as now red gold and purple dress,
Made man's whole life 'twixt care and war a toil and weariness.
And here, methinks, the greater blame must fairly fall on us;
For earth's first sons, till clad in hides, felt in a rigorous
Cold winter grievous pain, but we should nothing feel amiss,

Lacked we our purple robes adorned with big gold broideries,
So we but owned a common gown our body to defend.
Therefore the human race in vain, and to no useful end,
Toils evermore, and spends its time in worries needlessly,
And that because it ne'er has known the true philosophy
Of having, nor the limits which must real pleasure bound.
This, step by step, has carried life out to the vast profound,
And from the abyss stirred mighty tides of war to seethe around.

Yet sun and moon, that sleepless guard this ample universe,
Whose radiance lights its rolling tides their courses to rehearse,
Have taught men out and out that years and seasons come and go,
And all moves round by certain rules and sure, however slow.

Men too had long begun to dwell fenced in by sturdy walls,
And land had been divided, shared apart, and tilled by thralls,
The sea had blossomed forth with ships that bellied canvas bore,
And cities by sworn treaties bound allies and friends, before
Poets began to tell the facts of history in song:
For even letters had not been discovered very long.
Wherefore this age, in which we live, is powerless to survey
What fell aforetime, saving when sound reason points the way.
The arts of seamanship, and tilth, of building, equity,

Warfare, and travelling, and dress, and whatsoe'er there be
Of this sort; the refinements which are life's supreme delight,
Music, and song, and painting, and hewn statues smooth and bright,
By practice and experience of never-tiring will
Were taught to learners, slow indeed, but pressing forward still.
So gradually, one by one, time forced on human sight
Each thing in turn, by reason raised into the realms of light.
For 't is but right that orderly, by little at a time,
The arts should grow more clearly known, until they reach their prime.



BOOK VI.

OF STRANGE THINGS.





BOOK VI.

World-famous Athens first of all in time forgotten gave
To sick mankind corn's fruitful crop, their failing force to save;
She first made life afresh for them; she first sketched out the lines
Of law; she first conferred whate'er soothes, sweetens, or refines
Existence, when she bore a man gifted with such a heart
As with an honest tongue the truth of all things to impart:
Whose fame of old widespread, though he be dead, now scales the height
Of heaven for his invention's sake divinely brought to light.
For when he saw that almost all the things a man demands
For use or sustinence in life lay ready to his hands;
That all mere life's conditions were as safe as safe could be;
That folk, of honours, wealth, renown, possessed abundantly,
More happy too than others in their children's good report,
Of torments of the heart at home no less became the sport;
That in despite of mind's control they worried life away
Without a pause, and gave perforce to wrath's complaining play;

He straightway recognized that in the vessel lay the wrong,
That through it's fault, and in it, whatsoever came along
From outer parts, though good before, must harm from it receive ;
In part because itself is slack and riddled like a sieve,
So that it never can be filled by any length of toil,
In part because he found it's touch alone would straightway spoil,
As with some noisome savour, aught that entered, great or small.
Therefore with words of truth he cleansed men's bosoms, and withal
Set limits to the wide domain of terror and of greed ;
And made it plain what ought to be that 'highest good' indeed,
Whereat all aim : he showed the way, how by a strait cross-road
We all may reach it, if the path with steadfast feet be trod.
He taught men too what sort of ills, even in their least affair,
By nature's accidents or force flit round them everywhere,
Besetting them in varied guise, since Nature made things so ;
And by what gate to sally forth to combat every foe.
He made it clear that men themselves stir up, and stir in vain
Most frequently, the weary waves of care their hearts to strain.
For just as boys at every noise begin to quake for fright,
When sightless in the dark, so we, albeit in broad daylight,
Are scared from time to time by things no worthier of fear
That those which frighten children in the dark, as surely near.
And this alarm and murkiness of mind no solar ray

Is needed to dispel, nor yet the dazzling darts of day;
But nature's look and nature's law its terrors will disperse.
So hasten we the more to spin our goodly yarn of verse.

And since I have explained how all the world is doomed to die,
How heaven consists of body born in ages long gone-by,
And have laid open most of what occurs in either sphere,
And must occur, what still is left to tell thou now shalt hear.
For I have once for all resolved to mount the wondrous car
Of storm-winds, and to calm their strife, that out of recent war
All things may settle into peace again as erst they were,
Which mortals contemplate, as they go on in earth or air,
When oft their minds are made the prey of terrified suspense;
Things which bow down the souls of men in lowly reverence
Of heavenly beings, holding them hard-pressed to earth, because,
Not knowing how things come to pass, they seek in fancied laws
Of gods their origin, assign control of every thing
To gods, and, finding no fit cause whence aught should rightly spring,
Think gods must needs have made it, in their puzzled brain's despair.
E'en those, who know that gods must live a life devoid of care,
If, ne'ertheless, they set themselves to wonder on what plan

Things run their course, and chiefly those, which human eyes can scan
Proceeding in the vast extent of ether overhead,
Are to the ancient prison-house of superstition led,
And call cross-tempered masters in, whom in their misery
They count almighty; knowing not at all what thing can be,
And what can not be, and what bounds of faculty there lie
Fixed irretrievably for each and finally, and why;
And so stray off from Truth, where'er their blindfold systems choose.

These thoughts except thy mind reject, and utterly refuse
To think of gods unworthy things, destructive of their peace,
The holy powers, whose dignity thy folly would decrease,
Will often harm thee: not that gods would ever so demean
Their sovereign might as seek in ire thy chastisement, I ween;
But that thyself wilt picture to thyself each tranquil soul
Of heaven's calm denizens as tossed on the tempestuous roll
Of anger's waves, and not approach their shrines with quiet heart:
Nor when their likenesses from their most holy bodies part,
As messengers to mortal minds of their divinity,
Wilt thou have strength to take them in in full serenity
Of soul! What then thy life will be is seen too easily.

That true Philosophy may give us wit that life to spurn,
Though I have taught thee many things already to discern,

Much still remains to tell, and must be decked in polished verse.
The system and appearance of the skies I must rehearse,
Must make my song of tempests, and of levin's dazzling light,
What is their work, and what the cause that speeds them on their flight;—
Lest into many regions, like a fool, thou part the sky,
And tremble as thou watchest whence, and whitherward, will hie
The winged fire;—how rooms shut close obstruct its course in vain,
How it will enter, reign a while, and hurry out again.
And oh, do thou, Calliope, in whom we men find rest,
The gods enjoyment, point me out the road by runners pressed
To reach the white chalk lines that mark my goal, that so erelong,
With thee for guide, mid plaudits I may grasp the crown of song.

For our beginning, thunder shakes the blue expanse of sky
Because the airy clouds, that wing their passage up on high,
By winds, that battle there, are each against the other driven,
For no one hears it echo from the clearer parts of heaven:
But wheresoe'er we see these throng to form the thickest crowd,
Its roar and murmurings become most frequent and most loud.
Again clouds cannot be of such a solid substance planned
As stones, or beams of timber, are, nor on the other hand
As slender as the mists and smoke that vanish on the breeze.
For in one case their heavy weight would cast them, as one sees

Stones fall, to earth; in the other they, like smoke, could nought avail
To hold together, or contain cold snow or showers of hail.
Sometimes across the outspread air they utter such a sound,
As canvass sheets produce, which o'er big theatres are bound,
And rattle, tossing up and down twixt pole and crossing beam,
Or now and then, when rent across by wanton tempests, scream
Exactly like the shrilly noise of parchment torn in two;—
For just this sound we recognize in thunders not a few;—
Or when wet clothes hung out to dry, or sheets of paper blown
Abroad, are buffeted by winds and beaten up and down.
Clouds too at times not as direct antagonists collide
With one another face to face, but rather, side by side,
By opposite impulses borne, scrape sluggishly along.
Whence that dry sound of rasping grates upon our ears, with strong
Persistence, till at last from their close quarters they get free.

Another way there is, whereby all things seem frequently
To quake at heavy thunder's shock, until the mighty wall
Of the vast universe appears to rend for instant fall.
When all at once the gathered force of some tempestuous wind
Has got itself entwisted in the clouds, and, there confined,
Faster its eddies whirl, and still more fast, till all about



The cloud is hollowness within, of denser mass without:
Then, when its might and fierce assault have split the cloud, it parts
With such a crash and rattle as to awe the stoutest hearts.
No wonder, since small bladders full of air can oft, we see,
Make such a horrid racket, if exploded suddenly.
And right good reason is there why the winds, when they blow through
The clouds, should make a noise: for clouds are seen by no means few
Floating on high, with ragged shapes and branched in many ways;
And just so, when northwestern blasts blow through the tangled maze
Of some thick forest, leafage sighs, and branches crash and creak.
Not seldom too the hurried force of some strong wind will break
Its way through clouds, dispersing them by its direct assault.
For what storms may do there plain fact leaves us no whit at fault,
When here, where they are milder, on the earth by simple brute
Force they can overturn huge trees dragged from their lowest root.
Waves too there are in clouds which make, in breaking heavily,
A murmur, as it were, just as it happens with the sea
And deep streams, when their billows break in foam upon the beach.

And when from cloud to cloud the force of fiery lightnings reach,
Should the receiving cloud perchance with wet be brimming o'er,
The end is that 't is slain outright with an immense uproar;
As white-hot iron, freshly from the furnace ta'en, when we
Plunge it in icy water straight, will hiss ferociously.
If otherwise the levin fall upon a drier cloud,
It kindles instantly, and burns with roaring long and loud,
Just like a fire, that wanders through the wild bay-crested hills,
Assailing and consuming all, where'er the whirlwind wills:
And nothing in the world will burn with such a crackling blaze,
Such terrifying noises, as Apollo's Delphian bays.
Lastly much noise of ice-floes, and the ring of falling hail,
Will often echo through the clouds that high above us sail,
For when contending winds compress together hard and fast
Storm clouds like mountains full of hail, they needs must break at last.

And this is how it lightens too; when clouds together blown
Shake out of them much seed of fire, like stone if struck on stone
Or iron; for then also just a momentary light
Leaps quickly forth, and sheds abroad sparks marvellously bright.
But, as it haps, the thunder's growl is heard long after we
Have seen the levin's flash, because things aye more leisurely
Approach the hearing, than they move the seeing, faculty.

The fact may thus be ascertained: we only need to watch
A woodman lop some tall tree's bough far off: our eyes will
catch
Sight of the two-edged axe's fall some moments ere we hear
The echo of its stroke: just so will levin's glare appear
To sight, ere thunder's peal can reach our ears, though both
alike
Own one same source, the fire begot when clouds together strike.
Now on this wise are certain spots illumed with fleeting light
By clouds, and storm-racks flash abroad the levin's quivering
might.
When wind has got inside a cloud, and turns about therein,
It renders it, as said before, thick outside, void within:
Its very motion makes it hot, as we perceive that all
Things will grow overheated by quick movement, and a ball
Of lead, if swiftly sped and far, is in the journey spent:
So when the wind, grown over-warm, the sable cloud has rent,
It spreads abroad the seeds of fire at once, as forcibly
Expelled belike, which form the flames whose quivering flash
we see:
Thereafter follows sound, that with more tardy advent plies
Our ears, while sights more quickly reach the vision of our eyes.
Now this occurs when clouds are thick of body, gathered too
By wondrous forces pile on pile beneath th' o'erarching blue;

Lest they mislead thee, since we see how broad they are below,
But to what heights they tower above have seldom means to know.
Yet take but pains to scan them well when, shaped in mountains' guise,
A gentler wind is wafting them across unruffled skies,
Or when thou see'st them spread along some hill-chain's lofty crest,
One upon other heap on heap together packed and pressed
In stationary grandeur, when all winds are laid to rest:
Then 't will be in thy power indeed their massive size to guess,
And view huge rocks, that overhang vast caves of deep recess.
So when a sudden storm gets up, and winds these hollows fill,
They fret for injured dignity, shut up against their will
In cloud, and threaten damage, like wild beasts inside a cage;
From this point now, and then from that, they bellow out their rage
Through their cloud-prison, wheeling here and there to find a vent,
And pick thereout and mass much seed of fire, till they present
A rolling semblance of the flames in hollow kilns that blaze;
And then the cloud is rent, and they flash forth in quivering rays.

So also whence that golden sheen of fire, that falls like rain
Swift-winged earthward, comes, is thus, I take it, rendered plain.

Clouds of themselves much seed of fire must of necessity
Contain ; for, whensoe'er they are of moisture wholly free,
Their tints are mostly those of flame, bright shades of gold and red ;
And much besides upon them by the sunshine must be shed.
So have they right to redden, and to cast forth fiery jets :
And when the force of winds these clouds to one close quarter gets
By thrusting, pressing, gathering, they cannot but outpour
These seeds, which flash their dyes of flame the whole horizon o'er.
It lightens too whenever clouds are gradually thinned ;
For if these, while in motion, are dissundered by the wind
Quite gently, and melt quite away, then in their own despite
Their seeds, which make the levin, needs must fall, but then their light
With no loud noise, or uproar, or affrighting thunder, shows.

And now again what natural ingredients compose
The thunder-bolts, a heavy smell of sulphur in the air
About their marks, their charrèd track, their very strokes, declare ;
For these of fire, and not of wind nor yet of rain, are proof,
Besides they often kindle flames upon a house's roof,
And make them masters of the house itself with wondrous speed.
Now Nature makes their fire, beyond all other fires indeed,

Exceeding subtile, wrought of such minute and moveable
Bodies, that nothing in the world can its attack repel.
For the resistless bolt goes through a house's stoutest wall,
As shouting and loud voices do, through stones and brass and all:
Nay brass and gold are melted in a moment at its touch:
It causes wine to vanish out of goblets not so much
As even cracked, because its heat at coming renders rare
With perfect ease, and loosens all around, the earthen-ware,
And, winding thus its way within through the minutest rents
Dissolves the wine, and carries off its primal elements:
A thing which, as it seems, the sun's hot rays could never do,
Though poured in quivering heat thereon unending ages through;
So far is this the stronger and more active of the two.
Now in what way these bolts are made, and gifted with such power
Of impact, that their blow can rend apart the stoutest tower,
Can pluck asunder post from beam, can wholly overturn
Our houses, our sepulchral piles can wreck and then can burn,
Can kill our men, and strew our fields with cattle newly slain,
And so forth,—by what force they do all this, I must explain;
And with mere promises no more thy waiting ear detain.
We may be sure that thunder-bolts of clouds built up on high
In solid thickness are begot; since from a sunny sky,
Or one but lightly clouded o'er, they ne'er have been cast out.

That this is so is evident from facts beyond a doubt:
For then throughout the realms of air clouds gather round about,
Till folk might deem that all the shades of darkness had been driven
To quit their Acheron, and fill the spacious vault of heaven:
To such extent do faces full of midnight's pitchy dread,
Born of the storm-rack's awful murk, hang down from overhead;
Whene'er the weather sets about these fiery bolts to form.
And so not seldom o'er the waves an inky cloud of storm,
Just like a flood of pitch let down from heaven, will seaward fall,
Brimming with blackness fetched from far away, and bring withal
Dark weather big with hurricane and lightning as with child,
Itself so thoroughly filled with fire and roaring winds and wild,
That folk on shore to shaking fall, and shelter seek for fright.
So must we be convinced that storm to some enormous height
Is piled above our heads, for clouds the earth could never keep
Shrouded in such thick darkness, were they not built heap on heap
In such vast numbers as to rob the sunshine of its powers.
Nor could they come, and drown it with such overwhelming showers,
As to make rivers overflow their banks, and flood the plains,
Except the air cloud-castles of unwonted height contains.
In this case therefore everything is full of fire and wind;

And hence incessant levin's light with thunder is combined.
For I have shown awhile ago that hollow clouds possess
Innumerable seeds of fire, and many must no less
Receive within them from the rays of sunshine and their heat.
So if it chance that the same wind, whose wingèd force has beat
The clouds together to one spot, has caused elicitment
Of much hot seed, and with this fire at once itself has blent,
A whirlwind works and whirls within their walls by no means wide
To sharpen forks of levin in fierce furnaces inside.
Because to bring it to a blaze two causes then conspire,
Warmth from its own fast motion first, and next the touch of fire.
So when the wind is heated through, and the strong impetus
Of fire has joined it, all at once the bolt, becoming thus
Ripe, as it were, asunder cleaves the clouds, and swift as hot
Goes forth to light with sparkling sheen each near and distant spot.
Next instantly ensues a clap, so heavy that we dread
Lest the dissundered realms of sky should tumble on our head:
And then a mighty trembling shakes the earth, and rumblings run
Through all high heaven, for then the whole wild tempest, pent in one
Quivers with the concussion, and gives voice to fearful roars;
Thereafter follows heavy rain, which in such plenty pours

That it would seem as if the heavens were turning into rain;
It falls so headlong down, as if the Flood were come again;
So much thereof do storms of wind and riven cloud-rack send
To earth, when forth from burning bolts swift-winged thunders wend.
Times are there too, when pressure from without compels a storm
Of wind to fall upon a cloud with ripened lightning warm:
Then, when it splits it, instantly, that wheeling coil of flame
Falls down, to which our fathers' speech gives thunderbolt for name;
And this in all directions, as its forces may require.
Sometimes it happens too that wind, which starts devoid of fire,
Gets kindled ne'ertheless in its long journey through the wide
Expanse of space, and, as it goes in travel, casts aside
Some larger elements, less fit for passage through the air,
And takes on other smaller ones, which it has gathered there,
Along with it, whose blending breeds combustion as it flies,
In much the same way as a ball of lead of any size
Will oft grow heated in its course, and in mid air acquire,
In change for much of hardness lost, fresh particles of fire.
And now and then fire comes from the mere vigour of a blow,
As violent cold winds, devoid of fire, by striking show;

And that because, if winds on cloud with force unwonted beat,
They give an opportunity for elements of heat
Out of themselves, and out of that which gets the shock, to meet.
So, when we strike cold iron on a flint, is fire begot;
And not a whit the less, because the iron is not hot,
Do sparks of glowing heat leap forth the moment that we strike.
An object therefore may be fired by thunderbolts in like
Fashion, whose state for taking fire is meet and well-disposed.
And yet indeed strong wind must not be heedlessly supposed
To be quite cold, since from above 't is sent with so much force;
For, even though it may not get enkindled in its course,
'T is tepid at the least with warmth acquired, when it gets here.

A thunderbolt moves quickly, and right hard its blows appear,
And with a very swift descent it hurries to its goal;
Because, whilst stirring in the cloud, it first collects its whole
Strength all together, and applies vast effort to its start:
Then, when its growing violence compels the cloud to part,
It is thrust out, and therefore with most wondrous force must fall,
Like missiles flung by catapults against a city wall.
Moreover of small particles and smooth it must consist,
And such a nature own as naught can easily resist:

For it can slip through obstacles, and pierce the closest way:
So, since few obstacles occur occasioning delay
Or stoppage, it glides swiftly on its road of downward flight.
Besides, because all weighty things by self-inherent right
Of nature tend to fall, but, when a blow accrues beside,
The impetus is doubled and its force is multiplied,
Therefore with greater vehemence and speed, whate'er would stay
Or block its path, it sweeps aside, and still pursues its way.
Lastly because it starts from far away, it ought to don
Accumulate velocity, which grows in moving on,
And strengthen what was strong before, and fortify its blow,
For all the seeds of thunder, wheresoe'er begot, are so
Into a single focus, if we so may term it, brought,
As all its rolling elements to one career are wrought.
It may be too that air itself contributes bodies free,
Whose blows add fuel to its fire's extreme velocity.
Sometimes it travels harmless and unharmed through many things;
For fluid flame with ease goes through the smallest openings:
Many it breaks to pieces, when its own first-bodies hit
Their bodies on the very point that holds them closely knit:
Moreover brass it liquefies, and quickly fuses gold,
Because of atoms most minute its force consists, that hold
Loosely together, and of smooth first bodies, which appear

With ease to work their way inside, and, once established there,
Undo at once each binding knot, and loosen every tie.

And oftenest in autumn-time the house of heaven on high,
Bedecked with stars' bright clusters, shakes, and with it all the earth;
Or when the flowery days of spring once more are come to birth.
For winter's frosts extinguish fire, and winds in summer's drought
Grow faint and fail, and fleecy clouds alone are seen about.
But when the seasons of the skies are in their middle tide,
All the conditions requisite for thunder coincide:
For in the very narrows of the year both cold and heat
Commingle, which, for clouds to forge their levin-bolts, must meet,
So that a hurly-burly thence ensues, with things at cross
Purposes, and the skies with fire and storm-cloud madly toss.
For when the first incoming heat and last outgoing cold
Forgather, this is spring-time; and for causes manifold
Things contrary must needs contend, and get into a swirl.
And when heat nears his end, and frost his banner 'gins unfurl,
To mingle battle in the months which we call autumn-time,
Then too do summer's dews conflict with winter's biting rime:
Therefore these seasons well are termed the narrows of the year.
Nor is it marvel if therein more thunderstorms come near,
And more of turbid tempest stirs amid the realms of sky,

For then a doubtful warfare is in waging up on high,
With flames for one side's army, for the other's wind and rain.

This is the way the levin's bolts' true nature to explain,
And see exactly by what power whate'er they do is done.
Not back and forward Tuscan rolls of magic verse to con,
In hope the secrets of the mind of gods to read thereby;
And so learn from which part of heaven, and into which, will fly
The wingèd fires, how rooms shut up obstruct its course in vain;
How it will enter, reign awhile, and hurry out again,
And what disasters from above will follow in its train.
But if dread Jupiter himself, or other gods of might
Supreme, with fearful rattlings shake their heaven that gleams so bright,
Casting their fire on this or that, whichever way they please,
Why smite they not the sinners whose most foul iniquities
Are wrought foolhardily, that they may breathe through riddled chest
The lightning's flames, and leave us their sharp lesson for bequest?
Whereas in fact poor folk with souls unconscious of offence
Are made the victims of their fires; these in their innocence
Are suddenly enwrapped in flame and whirlwind from on high.
Why do they aim at desert spots, and squander work thereby?

Is it for practice of their arms, to make their muscles strong?
Why do they let the Father's bolt go hurtling to his wrong
Into mere earth? Why does himself permit this, wherefore spare
To smite his foes? Nay further why, when skies are everywhere
Clear, does not Jove pour thunders forth, and earthward dart his levin?
Is it because, as soon as clouds have cloaked the face of heaven,
He straight descends, to get from them a nearer, surer, shot?
For what cause does he lighten at the sea? What has he got
Against it's melting mass of waves and floating fields to say?
And if he wishes us to get out of his missiles' way,
Why does he not resolve to let us see them as they fly?
If he would whelm us with his flames quite unsuspecting, why
Thunders he from the spot, so we their coming may avoid?
Why first are murk, and roarings dire, and mutterings, employed?
Again how canst thou deem that he to many parts can send
His bolts at once? Or wilt thou dare against plain fact contend
That in one moment can occur no more than just one blow?
Why this has happened often times, and must of needs be so,
For just as rain on many spots at once its drops will shed,
So at one time may thunderbolts be far distributed.
Lastly why shatters he some god's most venerated shrine
With useless fire; nay his own seats of majesty divine?
Why does he damage brother-gods' well-carven images?

Or honour rob by forceful wound from nobler forms than these?
Why seeks he out most frequently the highest spots? and why
Do we most oft on mountain-peaks his fiery traces spy?

Now furthermore 'tis easy from the truths evolved before
The thing which Greeks, from what it does, call "prester" to explore,
And in what fashion from above it comes upon the sea.
For so it haps that now and then 'tis let columnarly
Down out of heaven upon the main, and, round about beneath,
The waters boil with fury at the blowing of its breath;
And any ships, that then are in its mad commotion caught,
Toss terribly, and are in risk of deadly danger brought.
This happens when the wakened might of wind has not the power
To rend the cloud, as fain it would, but forces it to lower,
Till it looks like a column built from heaven towards the sea,
But slowly, like a thing by arms and fists thrust forcibly
Downward and outward from above over the watery waste,
So when the powers of pent up wind have cleft the cloud at last,
They burst upon the sea, and mongst its waves wild fury breed;
For then a whirling eddy comes straight down, and with a speed
No slacker bears along with it that cloud's tenacious form,
On whose arrival at the sea's dead level, big with storm

It hurls itself at once into the water bodily,
And stirs the briny depths to seethe and roar outrageously.
Sometimes too there are whirlwinds, which in travel through the air,
Rolling through clouds, some seeds thereof will gather here and there,
And counterfeit a waterspout descending from the sky.
From such, when they have touched the ground and are dissolved thereby,
Tremendous blasts of hurricane and gusts of storm proceed.
Still as these happen seldom, and the mountains must of need
Be always in their way on land, they oftener are seen
At sea, where outlooks wider spread with only air between.

Now clouds forgather when a host of tiny bodies flit
About this upper space of air, and at their meeting knit,
All rough in texture; which, although by slender couplings held
Together, yet to separate can hardly be compelled,
From these in the beginning clouds are made exceeding small;
Next they embrace each other, and by junctions mutual
Grow gradually greater, and along the breezes float,
Until foul weather rises out of regions far remote.
And therefore, in proportion as the summit of a hill,
Approaches nearer to the sky, in just such measure will

Its head more thick and misty be with dusky murk of cloud
At all times; just because the first consistency allowed
To cloudlets, while so slender that they baffle human sight,
Drifts on the wind to gather round the nearest mountain-height:
Where, since it happens that in time their crowd will greater grow,
Becoming more condensed thereby, they get the power to show,
And into air are seen to rise from off the mountain's brow.
For fact asserts, and we have felt whene'er we climb the hills,
That wind the space, that opens high and wide around them, fills.
Once more that many bodies from the surface of the sea
Ascend by means quite natural, is proved decidedly
By clothes hung out upon the shore, which clammy damp attract.
And thus, as far more likely than this well-established fact,
Off the salt deep to swell the clouds a host of bodies are
Drawn up, for cloud and sea are as to moisture similar.
Nay and from every river and from earth itself arise
Winter's thick fogs, and summer's haze as thick, before our eyes;
And these, like breath which men breathe out, are upward carried hence,
Till heaven is overshadowed by their sombre influence,
And cloudland gathers substance by degrees as they draw near.
For furthermore 't is pressed upon from yonder starry sphere
Above by heat, which thickens, as it were, and webs the sky
With nets of cloud-rack. Hither too from outer regions hie

Such bodies as are qualified rain-clouds and scud to form.
For I have demonstrated that these elements of storm
Are numberless, and infinite th' abysses of the deep,
And shown with how much swiftness, and how suddenly, they sweep
Across the intervening gulfs of void ineffable.
So it is not at all a thing too wonderful to tell,
That in a very little while with clouds thus mountain-high
Darkness and storm hide sea and land down-hanging from the sky:
Because through all the passage-ways of ether round about,
The breathing-holes, as 't were, of this huge world, beyond a doubt
The elements have liberty of passing in and out.

Come now and hearken; I will tell how what we christen rain,
As moisture grows in clouds on high, and then cast down again
Falls to the earth in showers. First I argue that a crowd
Of water's first-beginnings must with every mounting cloud
Rise out of everything; and next that in like fashion both,
Cloud and the water in the cloud, keep equal pace of growth:
As in each limb of one of us 't is clearly understood
That sweat and moisture wax alike with body and with blood.
Clouds too, beside this growth, are oft of water made more full
By drawing up sea-damp, just like a hanging fleece of wool,

When the winds carry them between the great sea and the skies.
And in like manner cloudward too from every stream will rise
Watery germs, and when these seeds of many sorts of wet,
Increased from every quarter, have by many methods met,
The clouds thus crammed together strive their moisture to expel
From causes twain ; the force of wind's compression, and as well
The very quantity of cloud, which massed in such a heap
Pushes and presses from above, till tears of rain they weep.
Once more the clouds when buffeted by winds and thinned thereby,
Or melting, stricken by the heat of sunshine from on high,
Pour out their rainy moisture in small drops, as wax, if thrown
In lumps upon a blazing fire, melts and drops quickly down ;
But heavy sheets of rain descend, when heavy stress of wind
With weight of clouds piled high in air has chanced to be combined.
And rains delay their ending, and hold on for many days,
When many seeds of water are stirred up in many ways,
When storm-cloud upon storm-cloud, and scud after scud, are found
In endless ranks to hurry up from every quarter round,
And all the face of steaming earth breathes only moisture back.
At such a time, if sunshine's ray through the thick tempest-rack
Can find a way to shine across the drops they shed below,

Gay on their sable back-ground gleam the colours of the bow.
As to the other things which grow apart, or all alone
Are made, or gather in the clouds; they all, ay every one,
The flakes of snow, the hail that comes with wind, the chilly rime,
Frost's mighty forces, ice that makes soft water for a time
As hard as stone, the check that reins swift rivers on the flow,
'T is but a very easy task to find their source, and know
In what conditions they are found, why they are formed, and whence,
When thou hast learned the attributes which mark the elements.

Now come and learn concisely what the laws of earthquakes are:
And bid thyself think first of all that earth is everywhere
Beneath our feet, as o'er our head, of windy caverns full;
And many a lake inside her breast, and many a pit and pool,
She bears at all times, ay and cliffs and broken rocks beside:
And many a river too, we must suppose, beneath her hide
Rolls down its waves and sunken stones with never-flagging pace:
For the same things must always be the same whate'er their place.
So with such objects underpinned, or lying loose below,
The upper earth is shaken by the mighty overthrow,
When lapse of time has undermined some vasty cave beneath.

For then whole mountains topple down, and quick as men draw
breath,
Great tremblings from that mighty shock go creeping all abroad.
And rightfully; for if a wain of no uncommon load
Goes by, the houses quake throughout which stand beside the road.
Nor are they jolted less, when through some loosened stone it feels
A moment's stoppage jerk its pair of iron-bounden wheels.
It happens too at times when some huge mass of soil will break
Away from sheer old age, and plunge in some big lonely lake,
That with the water's heaving waves the land will also shake:
As now and then a pitcher will not steady stand until
The oscillating motion of the wine inside is still.
Once more when wind, together brought through many a
spacious grot
Beneath her crust, with all its strength on any single spot
Pushes the hollows heavily, earth straightway is inclined
To lean to that side whither tends the pressure of the wind.
Then all the houses which upon her surface have been built,
The more just in proportion as they tower higher, tilt
Toward the same direction, drawn to ruin, and the wall
And cross-beams part, and these hang free, as on the point to fall.

And yet men are afraid to own that some dread fate to come
Awaits this wide wide world of ours, some overwhelming doom,

Though they see how such masses of its soil lean all one way.
For, saving that the winds draw breath, no native power to stay
Could hold things back, or hinder all from being overthrown.
But now because their gusts are lulled and swell alternately,
Now mass, as 't were, their squadrons for the charge, now routed flee,
The earth more often threatens us with falling than in fact
She does fall. She will bend awhile one way, and then react,
Lean forward first, then straight regain her balance from the shock:
And this is why now this way and now that whole houses rock,
The attics most, the mid-floor less, the basement least of all.
And just these very greater sorts of tremors earth befall,
When wind and some exceeding force of air asudden pressed
Together, either foreign-grown, or born of her own breast,
Into the hollow places of her womb have fallen and met.
These long within its cavernous abysses whirl and fret
At first with angry noises, then, with vigour gathered there
By constant agitation, burst at once to upper air,
Cleaving the depths of soil to leave therein a mighty gap.
At Syrian Sidon once, and once at Aegium, such mishap
Occurred, in Pelops' sea-girt land; for both of these, 't is said,
Fell through an earthquake, by just such a windy outbreak bred.
And many a strong-walled town besides has perished suddenly

By earth's much shaking; many too, engulfed beneath the sea,
Have in their own destruction whelmed their living tenantry.
And even if they burst not forth, the violence of air
And wind's wild fury, like a fit of ague, everywhere
Spread through earth's myriad passages, beget a shivering:
As cold, the very marrow of our bodies entering,
Shakes us despite ourselves, and makes our limbs to quake and creep.
Thus twofold fears our city folk in constant terror keep:
They dread the buildings overhead, they dread the caves below;
Lest earth by nature's force should break them up some day, and go
Asunder suddenly, and yawn with wide-spread jaws, until
With ruins of her whilom self the hollow she may fill.
Then let men fancy, as they choose, that heaven and earth must be
Imperishable, fore-ordained to last eternally:
To foil their theories the strength of peril very near
On this side or on that suggests at times this sting of fear;
"May not the earth from 'neath our feet be hurried suddenly
Away into th' abyss, and all the sum of what we see
Follow, till our whole world becomes a wreck disorderly?"

Now must we give account wherefore the ocean knows no growth.

And first of all men marvel why Dame Nature should be loth
To enlarge the seas, when into them there falls so great a tide
Of water, and the rivers flow thereto from every side.
Besides there are the roving rains, and storms that, flitting past,
Their drenching drops impartially on land and water cast:
Yea, seas have fountains of their own: yet ta'en together these
Make scarce one drop compared to all the mass of all the seas.
So, that the great sea does not grow far greater, now is not
So strange: and then the sun draws off some part thereof when hot.
For sure enough we often see the scorching sun-beams dry,
And throughly too, clothes wringing wet, when cloudless glows
the sky.
But seas are many, as we know, and o'er a mighty space
Extend, and so albeit the sun from any single place
In ocean's waste can only suck but little briny dew,
From its enormous bosom it can drink, and largely too.
And furthermore the winds of heaven from out the vasty deep
Mayhap absorb much moisture, as across its plains they sweep;
Because for wet roads to grow dry, and in a single night,
And slush to harden into ruts, is no uncommon sight.
Moreover I have shown that clouds likewise draw constantly
Much moisture, gathered from the wide expanses of the sea,
To shed it forth again on all the earth where'er they please,
When rain falls on the land, as they are borne upon the breeze.

Lastly because the earth consists of substance loose and thin,
And joins the seas, and with her shores girdles their levels in;
As water comes into the sea from earth, so equally
Ought water into earth to soak from out the briny sea;
For the sharp savour filters off, and to the riverhead
All the moist matter purified is surely backward sped,
Thence on the land to turn again in volume clear and sweet
By the same way the hollows first led forth its wavelets' feet.

Now for what reason jets of fire with such a hurricane
Of tempest though mount Etna's jaws breathe forth, I will explain.
For, bursting with no common threats of dire calamity,
The storm of flame, that lords it o'er the fields of Sicily,
Drew to itself the glances of the nearest neighbour-folk,
When seeing all the vault of heaven o'ercast with sparklit smoke
Men trembled, and their hearts grew full of anxious thought and doubt
What kind of new arrangements old dame Nature was about.
Thy gaze on such a point as this must wander wide and far,
Thy thought must scan in all their depths the sum of things that are,
Till thou rememberest that these are wholly infinite,
And recognizest that one heaven in all the realm of light
Forms but a very little part, infinitesimal

Matched with the whole, as one man matched with all this earth
is small.
For if this mighty truth thou once canst clearly comprehend
And realize, thy wonder at a host of things will end.
Does any of us marvel, if he happen to have caught
A sudden fever in his limbs, with dry hot burning fraught,
Or any other pain that springs from physical disease?
A foot will swell up suddenly, a racking ache will seize
One of our teeth, or e'en will dare assault our very eyes.
Hot erysipelas breaks out, and wheresoe'er it hies
Burns every part that it attacks, and creeps through all the frame.
For soothly there are seeds of more ill things than we can name,
And this our earth and heaven produce for us enough of harm
To generate, and gift with force, diseases' endless swarm.
So must we deem that all such things to all the regions wide
Of heaven and earth are amply from the Infinite supplied,
As have the power to move the earth with tremblings suddenly,
To bid the hasty hurricane sweep over land and sea,
Mount Etna's fires to overflow, red flames to fill the sky.
For conflagrations sometimes catch the heavenly vault on high.
And storm-clouds big with rain arise in denser masses, where
The seeds of water thus have been assembled in the air.
Ay but its fire's wild fury is too mighty, thou wilt say.
Why! so a stream looks wondrous great to him who till to-day

Has ne'er beheld a greater; so a man, and so a tree,
Appears gigantic; so in each kind of all things we see
The biggest which each man has seen he fancies is immense.
And yet all these, with sky's, and sea's, and earth's circumference,
Are nothing, matched against the sum of all the universe.

But by what processes this fire, roused all at once to fierce
Excitement, breathes abroad from out the barren furnaces
Of Etna, I will tell thee. First, the mount by nature is
All hollow underneath, propped up on caverns lime-stone-lined:
Then furthermore in every cave there must be air and wind;
For whereso air is quickly set in motion, wind is found.
So then, when this has grown quite hot, and all the rocks around
And earth, where'er it touches them, has warmed, and has thereout
Struck fire, that burns with rapid flame and flickers all about;
It lifts itself, and through the mount's straight throat will upward thrust,
And far and wide will spread its heat, and far and wide its dust
Will scatter, rolling forth its smoke black with the thickest murk,
And cast forth stones of wondrous weight to do their deadly work.
Doubt not then that these facts the force of stormy wind betray
Besides along that mountain's roots for not a little way
The salt sea-water breaks its waves, and swallows back its foam:

And from this briny sea there stretch huge caverns, till they come
Just underneath the crater's depths. Through these, we must
believe
Apparently, from open sea waves inward pass to heave
Within, and breathe abroad in steam, and flames of fire expel,
And hurl up rocks, and lifted clouds of blinding sand as well.
For in its summit there are what the people of the south
Call cups, but we are wont to term the mountain's jaws or mouth.

There are too some few things for which to allege one cause
alone
Is not enough: we must give more; whereof the true is one.
Thus if thyself should'st see far off the corpse of some one dead,
'T would commonly result that there would come into thy head
Many a means of death, 'mid which the right one would be told.
Because thou could'st not surely prove whether by steel, or cold,
He met his death, or whether by some poison or disease:
Yet what befell him must, we know, have been some one of these.
To do the same in many a case with real fact agrees.
In summer seasons Nile will swell and overflow his fields,—
That one sole stream which Egypt's whole rich territory yields,—
And often water all the land through all midsummer's heat.
Perhaps because against his mouths just then the north winds beat,
Which custom calls Etesians at that season of the year,

And blowing straight up stream obstruct his current like a weir,
Forcing it back, and causing it, though full, to run more slow.
Because no doubt against the flood of Nile those breezes blow,
Which from the chilly stars set forth, that circle round the pole;
Whereas from out the scorching south his grateful waters roll,
Mid'st savage tribes of negro race, whose skins' sun-blackened hue
Proclaims the midmost realm of day, first rising into view.
Or else 't is not impossible that adverse waves withstand
His outflow, silting up his mouths with massive mounds of sand
Cast landward, when the winds arouse the anger of the sea;
Whereby the exit of his stream becomes at once less free,
And so his current hurries down with less rapidity.
It may be too that round his head more copious showers of rain
Then fall, because the Etesian blasts of northern winds constrain
All storm-clouds thitherward from all the lands that lie between:
These to the midmost realm of day thus roughly thrust, I ween,
There, on its lofty mountain-sides compelled at last to rest,
Are jammed in mighty masses, and with mighty force compressed.
Perhaps amid the towering peaks of Ethiopia's hills
He gathers strength; where whitest snows in countless slender rills
Fall plainward, 'neath the melting rays of th' all-illuming sun.

Now hearken, for what character distinguishes each one
Of all those spots and lakes we call Avernian, I will tell.

And first their name 'Avernian' comes from fact, and fits them well,
Because to every kind of bird they are inimical:
For when in flight birds come above one of these places, all
Forget their courage, drop their sail-like wings, and straightway fall
Headlong with noiseless neck outstretched, it may be on the ground,
If just below them at the time the solid earth be found,
Or into water, if some lake Avernus spread beneath.
At Cumæ there is such a spot, where all the mountains' breath
Is sharp with sulphur, heavy too with smoke from burning wells.
In Athens town there is one too, just at her citadel's
Top point, beside the temple where Tritonian Pallas dwells;
Whither not once has carrion-crow yet winged his way to croak,
Not even when her altars with the fat of victims smoke.
Albeit they shun it not for dread of Pallas' doom that flung
Them forth for wakefulness ill-timed, as Hellas' bards have sung;
The very nature of the place gives reasons of its own.
In Syria too, say travellers, a spot like these is shown,
Within whose borders if a beast four-footed only haps
To tread, its own unaided powers compel him to collapse,
As if to gods of worlds below he fell a sacrifice.
Now all these things by nature's laws and nature's means arise.

And from what causes they occur, and whence they spring is clear;
Lest haply it should be supposed that Orcus' gate is here,
And we should then infer that hence the shadow-gods lure on
The souls of men to haunt in hell the banks of Acheron:
Just as it is a common tale that when wing-footed deer
But snuff, wild kinds of creeping things will from their holes appear.
Now learn how far from reason's truth these fancies are, I pray,
For 't is my task of simple fact to speak to thee to-day.
First then what oft I said before I would recall to mind;
How there are elements in this our earth of every kind;
Many of which, that serve for food, prolong the vital breath;
And many too inflict disease, and haste the approach of death.
And we have made it clear long since how these in varied sort
Suit various kinds of living things, existence to support;
For living things in nature, and in composition, are,
And in their first-beginnings too, very dissimilar.
Now much unpleasant matter through the ears gets in, and much
E'en through the nostrils works it way, noxious, and harsh of touch:
And there are objects not a few to handling and to sight
Exceeding foul, and some whose taste will ruin all delight.
Hence furthermore 't is ours to see, how oft to human sense

A host of acrid things, or foul, or heavy, cause offence.
To take one sample, certain trees are gifted with a shade
Of leaf so nauseous that, if a man by chance have laid
Him down beneath them in the grass, sick head-ache will ensue.
Folk say too that on Helicon's high mountain-top there grew
A tree, whose blossoms' noxious stench would rob men of their lives.
Now from the ground, thou wilt observe, each one of these derives
Its birth; for seeds of many things and mixed in many ways
Earth in her womb must countless bear, yet separately raise.
The pungent fumes of night-lamps, which, extinguished by the breeze,
Offend our nostrils, put a man to sleep who from disease
Is liable to falling-fits and foaming at the lips.
A woman sinks back fainting, and her dainty finger-tips
Let go the bright embroidery they wrought, if while unwell
She haply chance the strong perfume of beaver-oil to smell.
And many other things beside, not only these alone,
Loose all the limbs, and cause the mind to totter on her throne.
For instance if at the warm baths thou make too long a stay,
Bathing just after supper, with what ease sense slips away,
Leaving thee tumbled helpless at the bottom of the bath!
How easily does charcoal to our brain find out a path
By its strong power of smell, unless we water quaff before!

And, when in all their fervent heat they spread his body o'er,
The fumes of wine act on man's nerves just like a deadly blow!
Why, see'st thou not how sulphur in the very soil below
Our feet is formed; how there is bred bitumen's nasty scent?
And how, when, seeking veins of gold or silver, men are bent
With iron pick to pry into the hidden things of earth,
Such fetid exhalations at Scaptesula have birth?
What mischiefs from the gold mine's breath incessantly arise?
What haggard looks they give men? how they colour skin and eyes?
Dost thou not see, dost thou not hear, with what celerity
Those, who in work like this are forced by hard necessity
To spend their days, die off, how soon their vital powers decay?
These exhalations then the earth gives forth in many a way,
And breathes them out into the air and open light of day.
Thus too must spots Avernian bid their subtile vapours rise,
Fatal to birds, which, passing up from earth towards the skies,
With deadly poison so pollute a portion of the air
That, soon as ever on the wing a bird is wafted there,
'T is instantly arrested by the undiscovered foe,
And falls upon the very spot from whence the vapours flow.
There when it lies th' identical foul exhalations' force
Soon drags from all its limbs their small remains of life of course.
For at the first these nothing, save a sort of burning, cause,

But after, when the bird has fallen into the very jaws
From which the poisoned vapour rose, it must disgorge its life:
Since all around the mischief there is infinitely rife.
At times it haps too that the strength of this Avernian breath
Dispels the air, that lies between the bird and earth beneath,
Until almost a vacuum is left for middle space.
So when the former in his flight arrives at such a place,
His pinions falter all at once, vain is each effort made,
His wings on either side beat on to find themselves betrayed;
And when he cannot rest on these to keep his buoyant state,
Nature obliges him to fall by reason of his weight
To earth, and, lying prostrate 'mid the almost emptiness
Of air, to shed his soul through all his body's passages.

Once more, the water in our wells in summer grows more cold,
Because the earth is rarified by heat, and quits its hold
Of any seeds of warmth it has, which fast to air are sped.
The faster then her inner heat is thus diminished,
The colder grows the water which her outer crust conceals.
On the other hand when earth by cold is hardened and congeals,
Growing together, as it were, it rapidly expels
Whatever warmth it had in it into the nearest wells.
They say there is a fountain hard by Ammon's holy fane

Whose waters cold in daylight, warm throughout the night, remain:
And men make marvel greatly at that fountain, and suppose
It quickly warmed by some fierce sun, beneath our world that glows,
When night has in her awful gloom enveloped upper earth.
But this is very far away from truth, and nothing worth.
Because if sunshine, touching all the fountain's face, has not
In daytime had the power to make its upper portion hot,
In spite of all its mighty heat when shining high in heaven;
How could it, since to this our earth so dense a bulk is given,
Heat it from underneath, and warm its waters through and through:
Particularly when its rays have often much ado
To find their scorching heat a way through houses' outer walls?
What is the reason then? Why thus the miracle befalls.
The earth is looser round the fount and warmer than elsewhere,
And to the water's body many seeds of fire lie near.
So, when the night has covered earth with shades that teem with dew,
It rapidly grows colder, and begins to gather to
Its particles, and thus, as if squeezed tightly by the hand,
Throws out into the spring the seeds of fire at its command,
Which quickly make the water warm as well to touch as taste.

Then soon as e'er the risen sun has by his rays displaced
The night, and loosed earth's atoms once again with waxing heat,
Fire's first-beginnings turn again to take their olden seat,
And all the water's warmth anew to earthward beats retreat:
Thus with the dawn the fountain aye grows colder, as they say.
Besides upon its surface all day long the sunbeams play,
And underneath their quivering warmth its waters rarer grow,
Wherefore whatever seeds of fire it held, it straight lets go:
Just as it rids itself of frost which on its bosom lies,
Unbinding all the bonds of ice, and loosing all its ties.

There is another fountain too, a cold one, whereon tow
When thrown immediately takes fire and burns with ruddy glow,
And where a pine-knot likewise straight ignites, and grows not dim
Amid the waves, but blazing still where'er winds blow will swim.
Now this no doubt occurs because there in the spring abides
Much seed of warmth, and out of earth beneath it must besides
A host of fiery bodies through its mass of water rise
To wend abroad together, and to soar towards the skies:
Yet these are not so many as to heat the very fount;
Wherefore some force compels them through the water aye to mount,
And suddenly to burst abroad, and in the air to meet.
At Aradus amidst the sea a spring of water sweet
In this way gushes up, and parts the briny waves around.

And many other places in the ocean have been found
To furnish opportune relief to sailors' parching thirst,
Whose sweet fresh waters midst the salt up to the surface burst.
Thus therefore, through that fountain too may such seeds from below
Well up and break abroad, as, when on some rough knot of tow
They gather, or attach them to a floating knot of pine,
Ignite with ease immediately, since both of these combine,
Pine-knot and tow alike, within them latent seeds of fire.
See'st not how when a candle, which has happened to expire,
Is carried near the night-lamp, e'en before it touch the flame,
It will take light; and so a torch of pine will do the same;
And many other things, before the fire itself has yet
Come near to affect them, touched by heat from far, aflame are set.
This therefore with that spring must be the case, as we suppose.

Now further I will strive the laws of Nature to disclose,
Whereby a bit of iron is attracted by the stone
Which Hellas folk term 'magnet,' from the land they call its own,
Because where the Magnetes dwell it first was found of old.
Now people greatly wonder at this stone; for it will hold
At times a chain of little rings down-hanging from it, so
That five of them, or even more, may often in a row

Be seen extended, swaying with light breezes to and fro.
And whilst each seems dependent on the one above alone,
Still each through other owns the strong compulsion of the stone,
So throughly does its influence pervade them every one.
In matters of this character much first must be made good,
Before the laws of what we treat are clearly understood;
By travel long and roundabout we must approach our end.
So all the more, I pray thee, now with ears and mind attend.
In the beginning then there must from all the things we see
Be issued, and flow forth, and get dispersed, incessantly
Bodies which strike upon the eyes and rouse the sense of sight:
Scents too from certain objects pour forever, day and night:
Heat from the sun goes out; and cold from rivers evermore;
From salt-sea-waves the spray that eats our walls along their shore.
Sounds of all sorts drop ceaselessly athwart the airy waste;
Nay, and there comes into our mouths moisture of brackish taste,
When we are walking by the sea: when doctors make a mess
Of wormwood juice, if we look on, we feel its bitterness.
So far from all things are their gifts, like taste, and smell, and sound,
Cast freely forth, and spread abroad on every side around.
Nor is there any respite or cessation in their flow;
Because we never cease to feel; at any time, we know,
We may behold, or smell, or hear the sound of, anything.

Now I should like to say once more how loose of fastening
All things are made; as clearly in my first book has been shown.
Since, though from many points of view that this should be well known
Is of importance, most of all it signifies that here,
In what I am about to treat, our mind should be quite clear,
That naught save body blent with void was ever brought to proof.
Well first of all in caverns all the rocks that form their roof
Are wet with moisture, and let fall their drops of trickling dew;
So perspiration oozes from the human body too:
Man's beard and hair with freedom o'er his limbs and members grow:
Our food to every vein divides itself, increasing so
And feeding our extremities, ay e'en the smallest nail.
We feel how chilling cold, and how warm water's heat, avail
To pass through brass; nor gold, we feel, nor silver, e'er withstands
Its passage, when we grasp full cups of liquor in our hands.
E'en through the stone partition-walls of houses will the din
Of conversation creep, and smells and outdoor frost get in,
And fire's great heat, whose mighty power through steel has learned to pass,
Yea through the circling meshes of the Gallican cuirass;
Thus too disease invades the frame, inserted from without,
And thus, when earth and heaven give birth to tempests' noisy rout,

These, parting, take them off by rights alike through earth and heaven.
Since naught exists, save things to which rare texture has been given.
To this we ought to add that all the bodies, thus cast loose
From every object, will not aye the same effects produce,
Nor do they all in one same way to everything apply.
The sun, to take one instance, bakes the ground and makes it dry;
But ice he turns to water, and the snows of winter days,
Piled high upon the mountain-tops, are melted by his rays,
And wax grows liquid quickly, when subjected to his glow:
The heat of fire makes brass to melt, and causes gold to flow,
But will contract and shrivel up a hide or piece of flesh:
Steel, taken from the furnace, grows in water hard afresh,
While hides and flesh, made hard by fire, grow soft again therein:
The oleaster much delights the she-goat's bearded kin,
As if 't were of ambrosia made and dipped in nectar sweet,
Though no green thing to human-kind is bitterer to eat:
A pig will run from marjoram, and never dare to face
A perfume: these rank poison are to all his bristly race;
Though oft they seem to us to put new life into our blood.
On the other hand no fouler thing or filthier than mud
Can be conceived by human thought: yet swine delight in mire,

And wallow deep and roll therein, and never seem to tire.
One other question must be broached, before we take in hand
The special point I fain would treat: for thou must understand,
Since many openings are found in various sorts of things
That with unlike capacities each of these openings
Is gifted, each has ways and each a nature of its own.
The varied sorts of sense possessed by living things are known,
And all their proper objects in a special way receive.
By one, we know, sound enters, by another we perceive
The flavour of our victuals, by a third distinguish scent.
Again, one kind of thing through rocks and stones can find a vent,
A second can through wood exude, a third can pass through gold,
Through silver, glass, and so forth, will go others manifold:
Form will by one way travel, warmth another road will go;
And on the selfsame path some move more fast, and some more slow:
And this so happens surely just because each several road
Has its distinctive nature, as a short while since I showed,
To suit the varied character and texture of the things.
Wherefore since our foundations now by these long prefacings
Are safely and securely laid, and perfectly prepared,
The task that now remains to us will be by no means hard,
To show, to wit, the means and cause of stone attracting steel.
First from the stone a crowd of seeds, a tide, (in case we feel

That term fits better,) must flow forth, to scatter with its blows
The atmosphere which 'twixt the steel and it would interpose:
Then when this space is empty, and much room lies void between,
At once the first-beginnings of the steel fall headlong in
Hasting to fill the vacuum, and thus it comes to pass
The ring itself must follow, and drag on its total mass.
For there is nothing in the world whose primal elements
Are interlinked and bounden in cohesion more intense,
Than the unyielding texture and the icy cold of steel.
So is there less of wonder in the fact which I reveal,
That when these atoms of itself into the void have ta'en
Their way, the ring itself cannot but follow in their train.
And this it does; and, following till nothing intervene,
Tight to the magnet clings in bonds compact although unseen.
In all directions this occurs: where'er a void has been
Created, all the atoms which lie nearest it rush in
To fill it, straight or crosswise, from above or from the side,
Because they are impelled by blows from otherwhere applied,
And have not in themselves the power to upper air to rise.
Yet furthermore, (and this in fact the process simplifies,)
No sooner has the air before the ring been rarified,
And the extent of vacuum thereby been made more wide,
Than it immediately results that all the air, that lay
Behind it, bears it onward and propels it, so to say;

Because the air around them beats on all things constantly,
But at a time like this it gets the opportunity
To drive the steel, since on one side lies void where it may go.
So then this air, of which I speak, inserted subtly thro'
Its apertures to each small part, propels it from behind,
And pushes, as a ship is pushed along by sails and wind.
Thus then the ring is aided by a movement from outside.
Besides all this, all bodies must of need within them hide,
Some air, because their organism is naturally rare,
And everything is bordered and encompassed round by air.
This therefore, which its hollows, like a hiding-place, conceal,
With wild commotion aye is tossed, and beats upon the steel,
And smites the ring beyond a doubt, and stirs it up within:
And thus to whatso quarter its first impulses begin
To tend, towards the vacant side it hurries headlong on.
Sometimes too from the stone the steel seems eager to be gone,
Accustomed to retreat and to pursue alternately,
The iron wrought in Samothrace myself have frequently
Seen jump, and iron filings in a brazen basin go
Stark crazy, when a magnet has been held awhile below;
So mightily they seem to long therefrom to get away.
Now through the intervention of the brass such disarray
Is thus occasioned. First, the brass sends forth its greedy tide
Of atoms, and the iron's pores by these are occupied:

The magnet's tide comes afterwards, and, finding every pore
Already full, can get no place to flow through, as before.
Thus is its current made perforce to dash against and smite
The iron, and it then repels and puts to rapid flight,
Owing entirely to the brass, what else it oft attracts.
Now prythee make no marvel at another set of facts.
For other objects suffer no disturbance from this stone.
Some through their own great weight stand still, and gold of these is one.
And some cannot be moved at all, because so loose in these
Is their cohesion, that the tide can pass through them with ease;
And this with every sort of wood would seem to be the case
But because steel and iron hold, as 'twere a middle place
Between the two, when particles of brass have chanced to flow
Into their pores, the magnet's tide will set them on the go.

Nor are these objects in themselves so wholly alien
To all the rest, that few of just such sort are in my ken,
Which I could mention, where each fits its pair and that alone.
Lime is the only thing we know to fasten blocks of stone:
Pieces of wood are surely joined only by bullock's glue,
Till through some flaw the veins of planks will sooner gape in two,
Than the strong bovine fetters will consent their hold to loose.
Clear fresh spring water willingly will with the grape-vine's juice

Mingle, but heavy pitch alike and lighter oil repels.
Naught but the wool of sheep will take the purple dye, which shells
Impart, which once imparted ne'er can be washed out again;
Not e'en if thou should'st call in aid the waters of the main,
And all the sea with all its waves should try to cleanse the stain.
Once more, are there more things than one that fasten gold to gold?
And is not tin the only thing that brass to brass will hold?
How many more such facts could be found out! What then indeed?
Of so much beating round the bush thou standest not in need:
Nor is it fair that I thereon such lengthy pains should spend.
'T is better briefly in few words much truth to comprehend.
Where things in texture opposite have fallen to unison,
So that the hollow fit upon the full, each one to one,
The junction 'twixt two such is of the most enduring kind.
Occasionally too there are some objects so combined
And intermixed, as hooks and eyes are wont to interlace;
Which with our magnet and the steel would seem to be the case.

And now what is disease's true controlling law, and whence
Its morbid forces rise, to spread their deadly pestilence
Over the tribes of men or herds of cattle suddenly,
I will explain. And first I taught long since that there must be

Flying around us many seeds whose properties increase
Our vital force, and many which to death and to disease
Conduce most strongly. When these last have met by accident,
And have deranged the atmosphere, the air grows pestilent.
For all the forces of disease and plague, as I could prove,
Come from without, like clouds or fog descending from above
Athwart the air, or else from out the bosom of the earth
Herself arise, when through excess of moisture she gives birth
To putrid matter, smitten by untimely heat and rain.
See'st not how folk, who far from their own land and home remain
Abroad, are sorely by the change of clime and water tried;
Because great variance in these is found where they abide.
For what a difference between the Briton's skies is seen
And Egypt's, where the axis of the world appears to lean!
'Twixt Pontus too and Gades what a wondrous change we face,
Or where the sunshine bakes the skins of men of negro race.
As then we find four climates, each from each dissimilar,
Where the four winds are born, and where the world's four quarters are,
So their inhabitants in tint and features are unlike,
And different diseases on each race of people strike.
Elephantiasis along Nile's fertilizing tide
In middle Egypt is begot, and nowhere else beside:
In Attica the feet get sore, among Achaia's hills

The eyes; in other places in like manner other ills
Seize other parts and limbs. The change of atmosphere does this.
Therefore whene'er a climate, which to us unfriendly is,
Is set in motion, and there creeps therewith a hurtful air,
Like clouds or mist it glides by slow degrees, and wheresoe'er
Its steps come, breeds disturbance and creates an utter change.
So then, when our own atmosphere is brought within its range
It makes it foul, and like itself, and quite unfit for us:
This novel pest and mischief then, come on a sudden thus,
Settles upon the waters or on crops of cereals,
Or on some other food of man, or feed of animals:
Or else its forces in suspense the very air pervade,
So that in drawing in the breath we breathe, we all are made
Blended therewith to suck these seeds of death into our frame.
In the same manner pestilence has often wrought the same
Havoc with oxen; sickness so has slaughtered sluggish sheep.
Nor does it matter whether we ourselves no longer keep
Our old abodes, but clothe ourselves with air inimical
And strange, or whether Nature bids some tainted climate fall
Upon us, or some other thing to which we are not used,
By whose arrival fatal harm to us may be produced.

Once on a time a pestilence like this, a deadly tide,
In Cecrops' borders caused the land to mourn for them that died,

Voiding the roads of travellers, the town of citizens.
For rising first a long way off 'mid Egypt's reeking fens,
It travelled through vast tracts of air, o'er moving fields of sea,
Over Pandion's folk at last to brood malignantly:
Until in troops they fell a prey to sickness and to death.
At the first stage the victim's head grew hot with fever's breath,
And both his bloodshot eyes with light unwont were overspread,
The jaws and mouth turned black inside, and in saliva's stead
Secreted blood, the vocal tubes were choked with ulcers sore;
The tongue, the mind's interpreter, aye dribbled purple gore,
Enfeebled by distress, a load to move, and rough to feel.
Then when the deadly virus through the throat began to steal
Into the chest, and round the sick man's downcast heart to play,
All looked as if the bars of life itself were giving way.
For then the breath such noisome stench rolled outward through the jaws
As putrid corpses breathe, cast forth unburied by the laws;
And all the forces of the mind, and all the body's strength,
Went faint, as if the very doors of death were reached at length.
Torments of mental anguish with insufferable pain
Kept company; and groans were blent with efforts to complain;
Spasms of short breathing, constantly recurring night and day,
Cramping the nerves, and drawing up the limbs, would waste away

The little strength of folk worn out before with weariness.
And yet you could not see that, in their bitterest distress,
The surface of the body e'er was heated overmuch,
The skin when handled rather felt but lukewarm to the touch,
Though still with sores, as if inburnt, its tint was red, as when
Feverish erysipelas spreads o'er the limbs of men;
But fiery heat e'en to the bones pierced all the inmost frame,
And in the stomach, just as in a furnace, blazed the flame.
No kind of covering so light and fine could any find
As to be turned to use, but aye and only cold and wind.
Their bodies, burning with the fire of fever, some would lave
In chilly streams, and throw themselves stark naked in the wave:
Athirst for water many would into the nearest well
Cast themselves headlong, with their mouths wide open as they fell.
The parching thirst unquenchable, that drenched them all from top
To toe, made e'en the deepest draught seem but a little drop.
Nor was there any respite from the mischief. Bodies lay
Exhausted: Medicine mumbling, dumb with fright, had naught to say,
While, staring wide and glaring with disease, the eyes would keep
Forever rolling to and fro, and never rest in sleep.
And many other marks of death's approach were witnessed there;

Great perturbation of the mind distraught with grief and fear
The mournful brow, the countenance grown passionate and wild
The ears intensely listening, but aye with noises filled ;
The breathing sometimes stertorous and slow, and sometimes quick ;
The glary perspiration on the neck that gathered thick ;
Thin little flakes of mucus with a saffron hue thrown off,
And saltish, which the poor hoarse throat scarce raised though with a cough ;
Whilst in the hands the nerves would twitch, the limbs would quake, and cold,
Beginning from the feet, by slow degrees increased its hold
Steadily o'er the body. Then the last few hours begin,
The nostrils are compressed, the nose at the end is peaked and thin.
The eyes are hollow, shrunken too the temples, cold and dull
The skin, the grim mouth wide agape, the forehead tight and full.
And not long afterwards the limbs in death lie stiff and stark.
For commonly, when sunshine twice four times had quelled the dark,
Or at the ninth dawn's rising, they surrendered vital breath.
And if perchance a few folk then escaped the jaws of death,
Still with foul ulcers afterwards consumption's sure decay,

Causing the bowels to discharge black slime, beset their way;
Or much bad blood, while agonies of pain would rack the head,
Through suffocating nostrils would be violently shed,
And with it all the vigour of the body would be gone.
And if, when this excessive flood of tainted blood was done,
The man still lived, the malady would turn again to vex
The nerves and joints, or else attack the organism of sex:
So that some folk from abject fear of death or love of life
Lived shorn of their virility, self-ridded by the knife.
And some with neither hands nor feet still made a wretched fight
For bare existence, other some, though eyes were lost and sight:
So sorely did the thought of death afflict them with affright.
In certain cases men were seized with such forgetfulness
Of all things, that they even could not tell their own address.
Although upon the ground by scores body on body lay
In heaps unburied, still the birds and wilder beasts of prey
Would either hie them far away, the pungent stench to flee,
Or, if they made a meal, turned faint and perished speedily.
Indeed in all those woeful days few birds upon the wing
Were seen; the tribes of savage beasts, despite their ravening,
Scarce left the woods, and many by disease in some lone place
Languished and died. And, worse than all the rest, the trusty race

Of dogs, strewed thick in every street, gave up in agony
Dear life, wrenched from their limbs by force of this dire malady.
The soonest comers ran a race the vacant pyres to seize.
Nor was there any certain cure prescribed for the disease.
For that, whereby to one sick man the blessed leave was given
Once more to mouth the vital air, and view the vault of heaven,
To others would prove fatal, and death's path would only smooth.
One thing in all these troubles was most piteous, and in sooth
Fraught with more harm than aught besides; that any one, who saw
Himself assailed by the disease, as if condemned by law
To execution, lost all pluck and laid him on the spot
With sad heart down to look for death, resigned to bear his lot.
Never for one brief moment's space did one from other cease
To take by touch the poison of the ravenous disease,
As happens oft with hornèd kine, and flocks of woolly sheep.
And one fact more especially death upon death would heap:
Those, who refused in succour of their stricken kin to come,
For all their greediness of life, their dread of sudden doom,
Retributive neglect ere long with no less evil fate
O'ertook, with shame to boot, alone, unholpen, desolate:
While those, who at their posts remained, contagion swept away
And toil, where common decency enforced their constant stay,
And the low tones of weary men with mournful plainings blent:
Thus all the better sort of folk the death-pains underwent.

Then any one on any pyre in hurry to inurn
Would cast his dead, and worn with woe and weeping would return,
In many cases only to go sick of grief to bed.
Nor in that sad time could a soul have been discovered
In all the city not diseased or mourning, if not dead.
Besides all this the shepherd lads, the boys who tended kine,
The men whose skill the crooked plough could drive in one straight line,
Turned sickly: closely huddled in their huts their bodies lay
All dead together, fallen to plague and poverty a prey.
Above the lifeless corpses of their offspring here were spread
The parents' forms, as lifeless; there on sire and mother dead
The children would lie suffering, till vital breath was sped.
And in great measure all this woe converged upon the town
From all the country, brought by crowds of rustics broken down
With fear, and smit with plague, who still poured in on every side,
And filled each house and vacant spot, whereby with deadlier tide
Death swept the sick so closely packed in greater crowds away.
Many a victim, dragged abroad by thirst, extended lay
Stone-dead beside some fountain at the corner of a street,
Whose life had been cut short because the water was too sweet.
In all the public places, and in every thoroughfare,
The enfeebled limbs of forms half-dead were scattered everywhere,

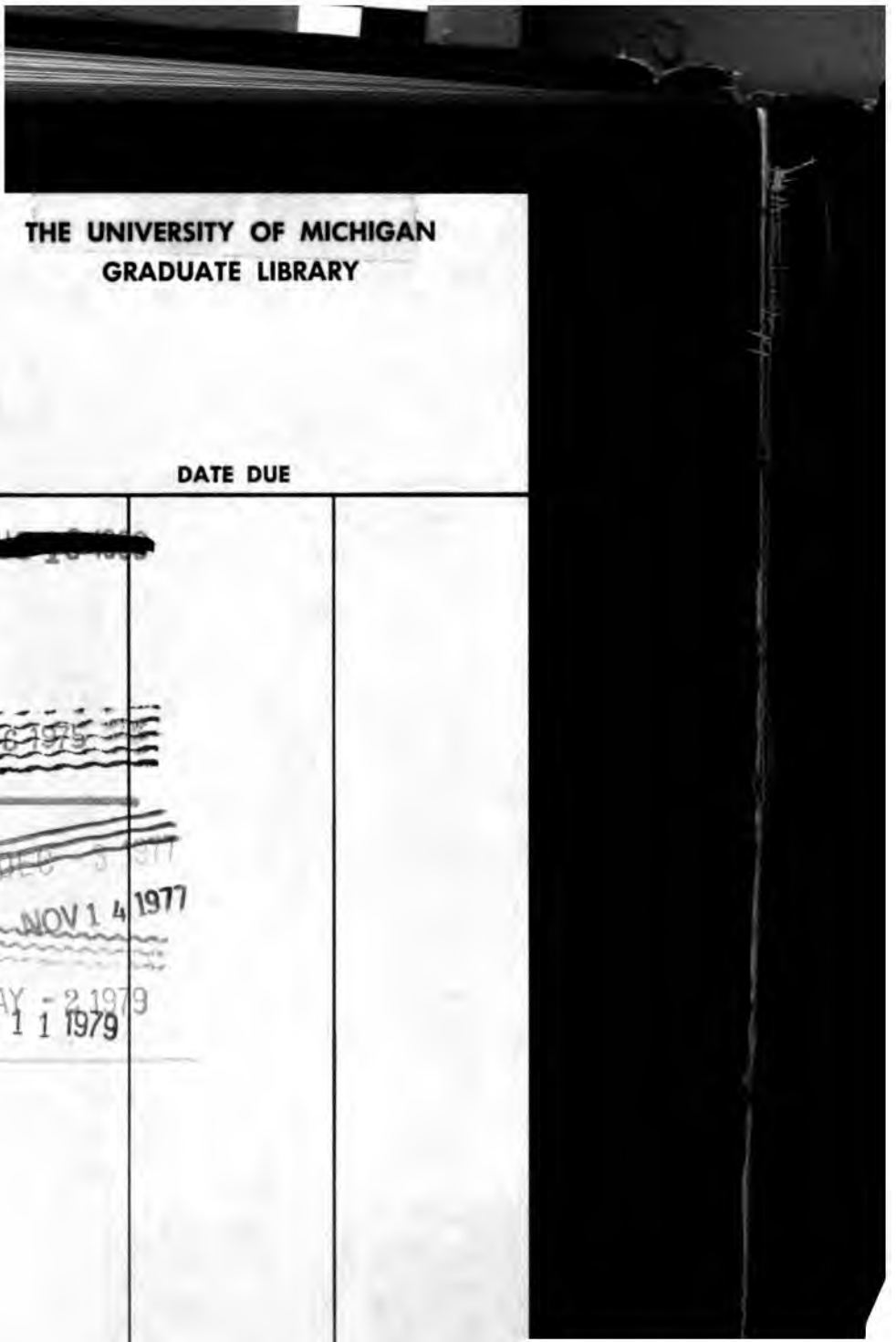
Fearful of stench, enwrapped about with rags, just perishing
From filth of body; skin alone their bones' thin covering,
Buried almost in ulcers foul and foul uncleanliness.

The holy fanes too of the gods, despite their holiness,
With lifeless corpses Death had filled, till every temple-floor
Of all the heavenly host alike with dead was covered o'er,
Where sacristans to refugees had short asylum given.
For then no reverence of gods, no majesty of heaven,
Was held important. Every thing gave way to present pain.

Nor did the city then those rites of sepulture maintain,
Wherewith her pious folk were wont to get them to the grave.
All was confusion and alarm: in sorrow each must have
Whatever burial circumstance allowed him for his dead.
And many a horror poverty and sudden pressure bred:
For some with loud cries strove to place a kinsman on the bier
Which other folk for other dead had been at pains to rear,
And put the lighted torch beneath: and much blood oft they spilled
Rather than leave their dead alone, their duty unfulfilled.

Turnbull & Spears, Printers, Edinburgh.





THE UNIVERSITY OF MICHIGAN
GRADUATE LIBRARY

DATE DUE

NOV 1 4 1977

MAY - 2 1979

PR 1 1 1979

BOOK CARD
DO NOT REMOVE

A charge will be made
if this card is mutilated
or not returned
with the book.

GRADUATE LIBRARY
THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN

GL

BARING
AUTHOR
001
884

UNIVERSITY OF MICHIGAN
3 9015 02648 7309